JUNE 2025 VOLUME 22 ISSUE 6

THE LOGGER'S BARK

a magazine

Radio Club of Tacoma



- New!

Yaesu FTX-1F
HF/50/144/430MHz
All Mode Field
Transceiver Page 74

In this issue:

- Art Bell—Talk Radio Legend & Ham: W6OBB p. 38
- Let's Talk About AI for a Minute... p. 7
- Join W7DK at Cheney Stadium for Baseball! p. 21
- Long Before the DX Code was the Amateur's Code! p. 81
- Cool Old Rig: Ten-Tec Omni-C Transceiver p. 61
- Greyline Prop: How it can help Your Dx-ing! p. 48
- SEARCH YOUR LOGS! Get a W7DK Loggers Cert! p. 15
- Echophone EC-1 WWII "Morale Radio" profiled p. 86

Cover:

AB-577 Team
Back Row L>R:
Doug AB7DG
Dan KD7SV
Jeff W8NGS
Brad KK7YQC
Julie W7JUL
Kneeling:
Mike W7MKE
Joe KG7ZYB

Photo W7UUU



W7DK 2025 Officers and Committee Leaders

Executive Committee:

President:	Adam Barbera W2NCC
Vice President:	Manny Adonis AD7MA
Secretary:	Gary McAdams WG7X
Treasurer:	(Acting) Doug Schafer AB7DG

Board of directors:

Board:	Mike Drorbaugh W7MKE
Board:	Paul Matney W7PFU
Board:	Doug Schafer AB7DG
Board:	Dan Vacanti KD7SV
Board:	Dave Ashley W7GEL

Key Committee Chairpersons:

Membership:	George K7GRS/Mike W7XH
Salmon Run:	George K7GRS/Mike W7XH
Infotech/IT:	Randy WB4SPB
HF Operations:	Phil K7PIA
Facilities:	Adam W2NCC
Property Mgmt.	Red WB7EC
Museum:	Dan KD7SV
Planning:	Manny AD7MA
POTA:	BJ KO7T
General Meeting:	Dave W7UUU
Bark layout & Editor:	Dave W7UUU
Assistant/Copy Editor:	Anne N7ANN

Contents

QUICK LINKS TO THE BIG STUFF!

Page 3	President's Corner
XX	From the Desk of the VP
Page 4	The Secretary's Report
Page 6	From the Editor's Desk
XX	Planning Committee
XX	Membership Report
Page 7	Ham Radio World News
Page 8	ARRL News & Views
Page 11	letters to the Editor
Page 86	Board of Directors Minutes
Page 94	General Meeting Minutes

xx=nothing submitted

But don't stop there! Each issue is 50 or more pages of fun and cool stuff to explore! Scroll on!

Have a submission for our next issue?

loggersbark@gmail.com



SMARTPHONES AND SATELLITE TEXTING

Ham operators have been using satellites for years. Now, today's smartphones are beginning to do the same. Advances in satellite technology have made it possible for the newest smartphones to send text messages even when there's no cell service. This exciting innovation is changing how we stay connected—especially during emergencies in remote areas where traditional networks just don't reach.

Satellite texting enables a smartphone to connect to low-earth orbit (LEO) satellites, forming a direct link with space-based infrastructure. This feature only works when the phone is out of range of standard cell towers. With this technology, a stranded hiker, backcountry camper, or remote worker can now send a critical message that could make all the difference in a life-threatening situation. It adds a new layer of personal safety and peace of mind when venturing off the grid.

Right now, smartphone satellite service is mostly limited to emergency texting. Major smartphone manufacturers are partnering with satellite companies to integrate this capability into their devices. While this early version isn't meant for everyday texting or checking Facebook, it's perfect for sending short, essential messages when no other communication is available. In time, this feature will likely evolve into something more robust, but even in its current form, it's a significant step forward.

Of course, satellite texting has its limitations. It only activates when there's no cellular coverage—if you're in range of a cell signal, your phone will use that network by default. Satellite-based messaging is also slower than regular texting. You won't be holding voice conversations or streaming YouTube videos over a satellite link anytime soon. And an important thing to remember: this technology requires a clear view of the sky. Dense tree cover, deep canyons, or buildings can block the satellite signal and prevent messages from going through.

Still, satellite texting from smartphones is just the beginning. There's a lot of exciting potential for satellite-connected smartphones in the near future. As companies like Starlink, Iridium, and Globalstar continue to expand their satellite networks, we could soon see the ability to make phone calls, send images, or even do video chats from just about anywhere on Earth. Once that happens, we'll no longer be tied to cell towers for mobile communication.

There's no doubt that the era of satellite-enhanced communication is here—whether you're using a smartphone or a ham radio. And for those of us who have been relying on radio waves for decades, it's fascinating to see the rest of the world finally catching up.

Until next month, 73

-Adam Barbera, W2NCC
President, RCT



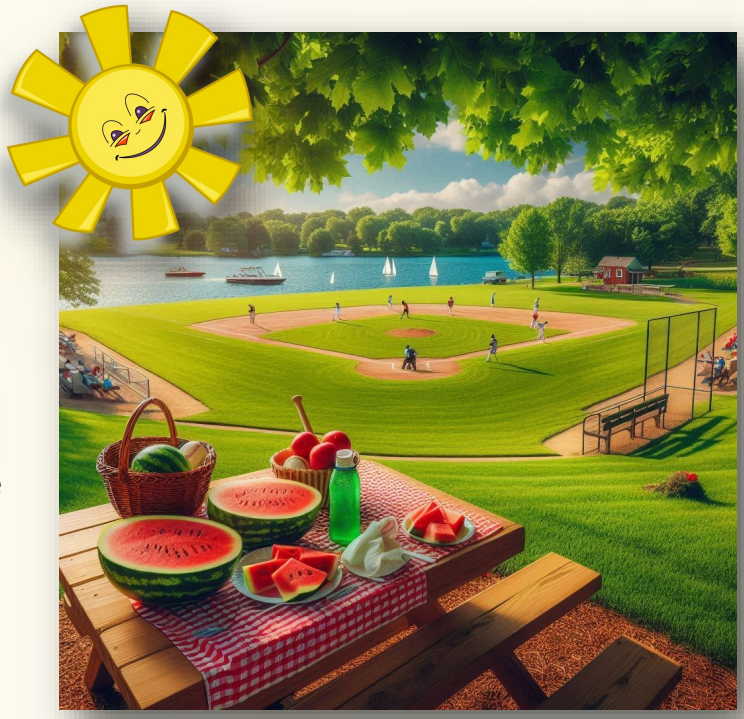
RETURN TO HOME PAGE
email loggersbark@gmail.com

SECRETARY'S REPORT

W7DK Secretary—Gary WG7X



BY THE TIME THIS HITS THE PRESSES, June will be in full swing and summer will be here! Traditionally June is the "Beginning of Summer" when we remember the old days when we got out of school for three long months of freedom! Of course, for most of us in the Radio Club of Tacoma, those days are far behind us. Nevertheless, we still have friends and family that have children that we can enjoy for the day, week or month before they're sent back to their parents!



For most of us though, summer is the month of travel. Where we hit the highways and byways of this great nation. My wife and I will be out there on the highway some this summer too. Let's all try to enjoy the nice weather and travel safely through the many constructions zones as we travel in air-conditioned comfort! Have pity on the DOT workers out there doing their part for our collective benefits in the heat.

Patience is called for when traveling, no matter how you do it, whether it's planes, trains, or automobiles, patience is needed…

That said, another tip for travel this year is: remember to carry all your travel documents! In today's political climate, carrying a passport might not be a bad thing. Also hopefully, everyone has the new "enhanced" drivers license? My wife and I got ours last year in anticipation of future travel. My license needed to be renewed last year anyway, and we took the opportunity to upgrade my wife's license too.

So, let's get to enjoying summer, traveling or staying at home. Eat a watermelon, go to a ball game, take a boat ride, just get out there and enjoy the nice weather no matter where you are!

The chilly, wet days of fall and winter will come soon enough and it's back to six months or more of the usual wet season. Don't get me wrong, I like winter too, but for many reasons, mostly because winter, with the short dark days and long winter nights is usually good for DX!

See? Had to sneak in at least one ham radio sentence!

-73 Gary WG7X



THIS ISSUE HAS BEEN A TOUGH ONE TO PULL TOGETHER but I've never let one "slide" yet, and I'm not about to start now. The reason this issue has been a challenge can be summed up in one word: *life*.

I pushed hard to get the May issue wrapped up early this year—and it paid off. It gave me a head start cranking out the roughly 33,000 words of "written by Dave W7UUU" content that each month typically requires.

That's a *lot* of words. Every new issue begins with a sea of blank pages, and I just have to look at them and think… OK—let's write! It's not always easy to do that!

A typical month also brings in another 3,000 or so words from contributors—columns and such—that need to be proofed, edited, formatted, and graphically presented.

But I love what I do. Serving as Editor of *The Bark* has been a truly rewarding chapter in my life, and I wouldn't trade it for anything. It's been my passion for the past 18 months. Still, things come up. Life interrupts. And the 60–70 hours I normally devote each month to writing and editing *The Bark*—a commitment I willingly accepted when launching this project—sometimes get squeezed.

The June issue landed right in the middle of a lot of pre-planned (and pre-paid) travel. First, a week in Ohio visiting my son and his wife, and spending time with their delightful twin daughters, Natalie and Nora. After a brief week back home, we were off to Missoula for another week, visiting our middle daughter who just got engaged (I'm actually writing this from the hotel in Missoula). And once we're home again, we'll barely have time to unpack before heading to Sea-Pac in Seaside, Oregon, where I'm presenting once again this year. (By the time you read this, that event will be in the rear-view mirror—look for my Sea-Pac wrap-up in next month's edition).

So, a large chunk of this issue has been written from hotel rooms! My amazing wife Anne, N7ANN, has been e*ndlessly* patient, graciously letting me "take over" the desk in each room with my portable dual-monitor setup, so I can work late into the evening.

I'm very pleased with how this issue came together. There's a lot of fun material that led me down some enjoyable rabbit holes. As many regular readers have probably noticed, I truly appreciate the wide sweep of our shared history, and I do my best to keep it alive. Many of my articles touch on classic rigs from the past, memorable (or notorious!) hams, and the long, winding path of amateur radio that brings us to today.



In our hotel in Missoula, Montana, as I am writing this column for The Bark

This month's topics range from the fascinating story of Art Bell, W6OBB (SK)—the iconic radio talk show host and devoted ham—to thoughts on the dangers of relying on AI, a look at the original Amateur's Code and the modern DX Code of Conduct, and some Greyline propagation insights. For our local RCT members, there's a heads-up on our upcoming "Baseball Day" at Cheney Stadium in Tacoma on July 24.

I hope you enjoy this issue—written across three time zones, over 2,300 miles, and still clocking in at well over 100 pages, with *not a single ad* in sight!

–Dave W7UUU





Missoula Montana in a fabulous room looking out onto the amazing "mountain meadows" of the city



In our hotel in La Grande, OR enroute up to Montana taking a more scenic route



A truly mystical stop at Joseph Canyon in Idaho… it's like a mini "Grand Canyon" but has an amazing (and sad) history involving the Nez Pierce tribe and Chief Joseph (the Elder). Anne N7ANN and Dave W7UUU

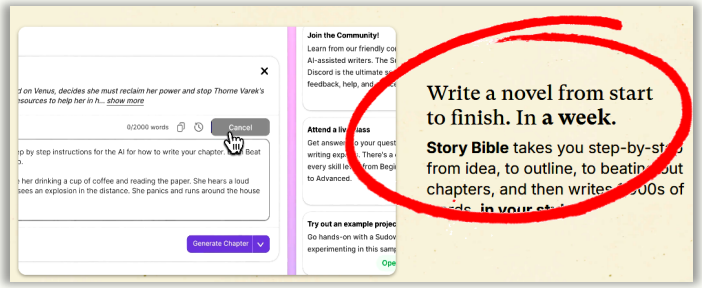


Our hotel in Coeur d'Alene, ID working on The Bark



SINCE DAY ONE OF MY TENURE AS *LOGGER'S BARK* EDITOR, I have had a pretty rigid stance against using any form of AI (artificial intelligence) for creation of articles, text, or technical explanations of *anything.* ChatGPT and other now-common AI engines were just getting press attention about that time, and now a year and a half later, they're everywhere: Perplexity, Grok, Gemini, DeepSeek, Brave Leo, Poe, Copilot, Pi, Arc Search, and many more. And surely more to come all the time.

The educational world is already spinning as a result of these new "robot authors" churning out term papers, book reports, and countless other student-written assignments. There are now almost as many "AI detection" websites as there are AI engines! Teachers at all levels of the educational systems are scrambling to find the best tools to sample their students' work for AI. But even that approach isn't a real solution—such tools will often flag human-written content as AI-written.



As editor of *The Bark*, only a few submissions have been sent to me for publication consideration…. maybe 10 total in the last 18 months. A couple were rejected due to sheer length (one submission, if formatted to fit *The Bark*, would have run 35 pages long!). A couple others were fictional stories—and both were well-written, but had almost nothing to do with amateur radio. But during that time, I've rejected three submissions outright simply because they were so clearly written using ChatGPT or one of the other AI writing platforms. It was not only obvious in the "computer-written *tone*" of the text, but all three immediately failed when checked with an AI detector website. The analysis came back "100% AI written; 0% human written".

I suppose over time that publications like *The Logger's Bark* and commercial magazines will end up publishing AI-written content, as the algorithms improve. It's inevitable in fact. But for my run as Editor, I've just said NO to any text written by anything other than a human (and I'm always happy to rework original submissions so the author looks great in print).

Images are a different story! In my initial planning for my version of *The Bark* in late-October 2023, I realized that I would need quite a few graphical elements. And I'm not an artist—neither analog nor digital! Since this would be an "internet-based" newsletter, I had to use license-free pictures or ones I took myself. So out of this need came my use of the Bing AI image generator. Below are a handful of the AI images that I've used—some of which are still used in *The Bark*:



RETURN TO HOME PAGE

email loggersbark@gmail.com



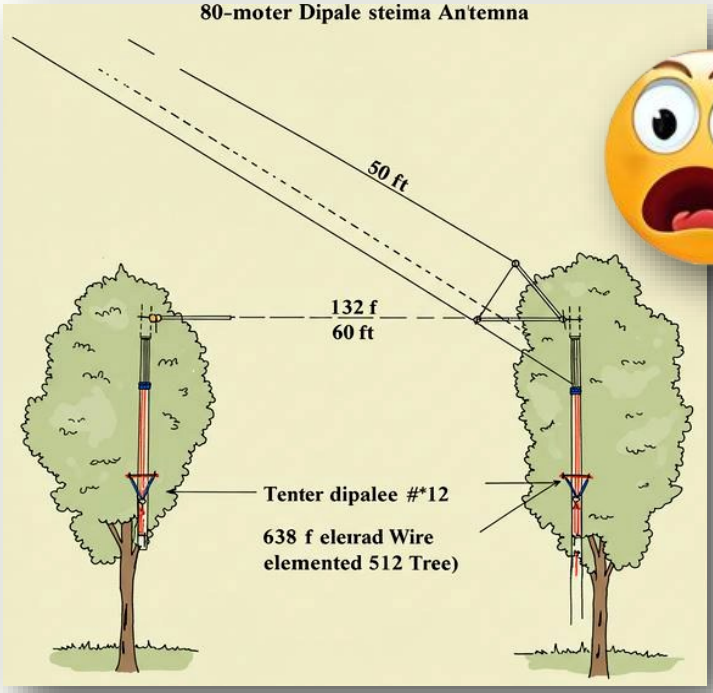
But not all AI graphics are created equal.

The examples on the preceding page are just graphical enhancements for textual pages, and generally don't contribute actual content to the article they may adorn. They're for show.

Most often, when AI "tries its hand" at technical diagrams, the results can be hilariously absurd—the kind of visual nonsense that makes engineers wince and everyone else laugh out loud.

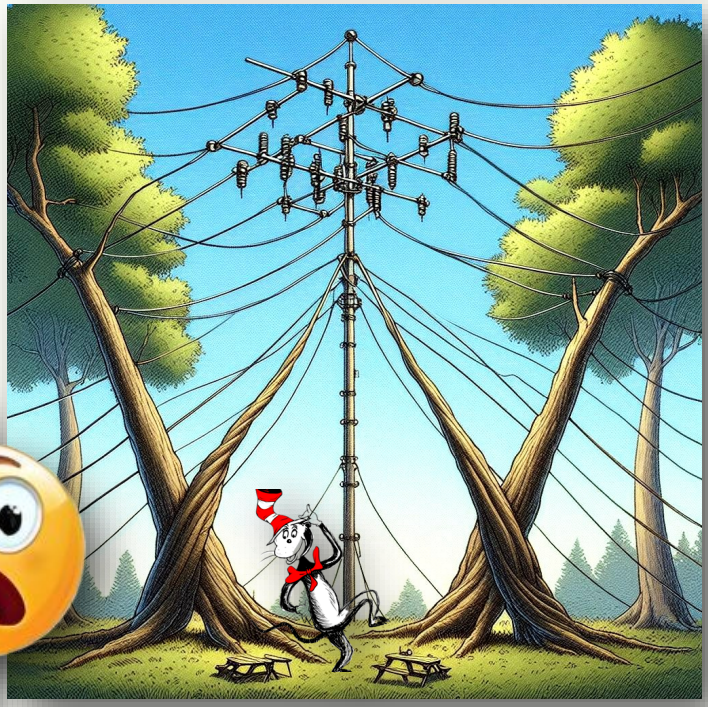
To illustrate this, I will refer to a recent post by one of my QRZ friends, Bill K2WH, who asked Google's Gemini to produce a technical drawing for him. It went like this:

"First off, I did not know Gemini could draw images for you. So I asked Gemini to draw me an 80-meter dipole made from 132 feet of #12 insulated wire, supported on the ends by two large trees both of which are 50 feet tall. And this is what I got:"



Gemini couldn't even agree on what to call it—a Dipale steima Antemna or a Tenter dipalee #*12, attached to an elemented 512 tree! If this doesn't crack up the technical observer in you, not much can! I literally laughed out loud over my morning tea when I saw this ridiculous "technical drawing".

So what better thing to do than pose the same question to a different AI engine. Which is exactly what I did, using the Microsoft Bing AI generator and this is the wonderfully "Dr. Seuss" version of an 80-meter dipole that MS spewed forth:



I so fully expected to see the Cat in the Hat peer out from behind a tree that I felt compelled to insert a license-free version of the fanciful feline himself.

The reality is the AI engines are not really intelligent at all! In most cases, they simply search the internet at blindingly fast speeds to find *inaccurate, outdated, and just plain wrong data* faster than any human possibly could. Sure—they can certainly be trained to write elegant sentences, and muster perfect grammar at every step. But very often factual data that's pulled into the AI results is just plain wrong—sometimes ridiculously so as the examples on this page illustrate.

In the case of generating technical drawings such as Bill's request for a very simple 80-meter dipole between two trees,



the training models that most of the AI engines use simply have never been "taught" how things like dipoles are drawn by humans. There is simply too much variation in human graphics creation for the AI algorithm to assimilate unless it was written and trained for that one specific task. That's currently a major focus in the AI development world—creating engines that are optimized for very specific and often engineering-level graphics.

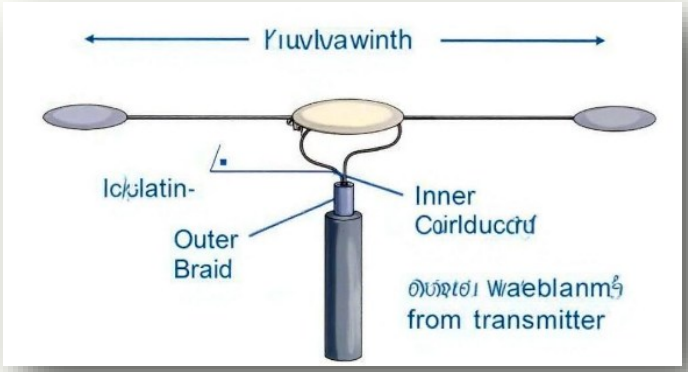
Even prompting the AI to "give it another go, mate" usually ends in failure and absurdity.

When Bill K2WH told Gemini of the errors:

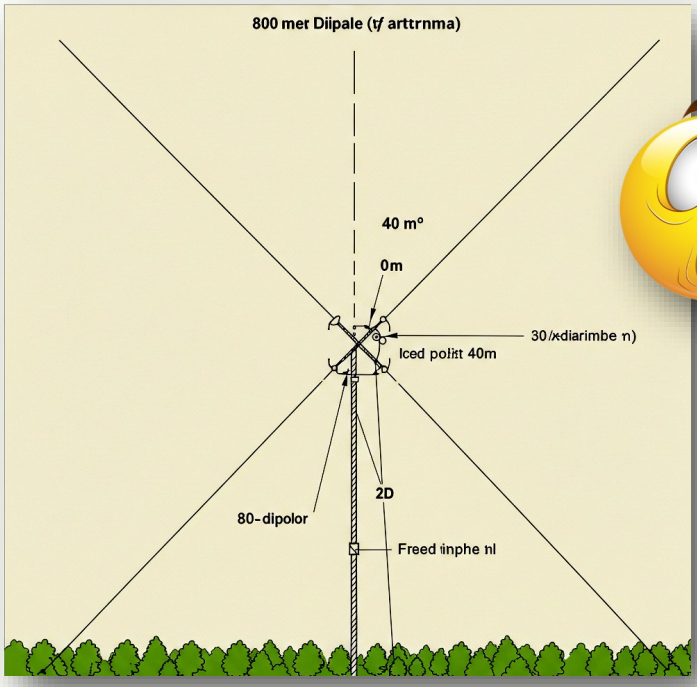
"I tried one more time. I said 'I give up. That image is completely wrong', Gemini responded, 'I apologize that the previous images were not satisfactory. I understand your frustration, and I want to assure you that I'm doing my best to fulfill your request. While I can't guarantee a perfectly accurate image, I'm willing to try again'. To which I replied, "YES". So Gemini then provided this updated image".

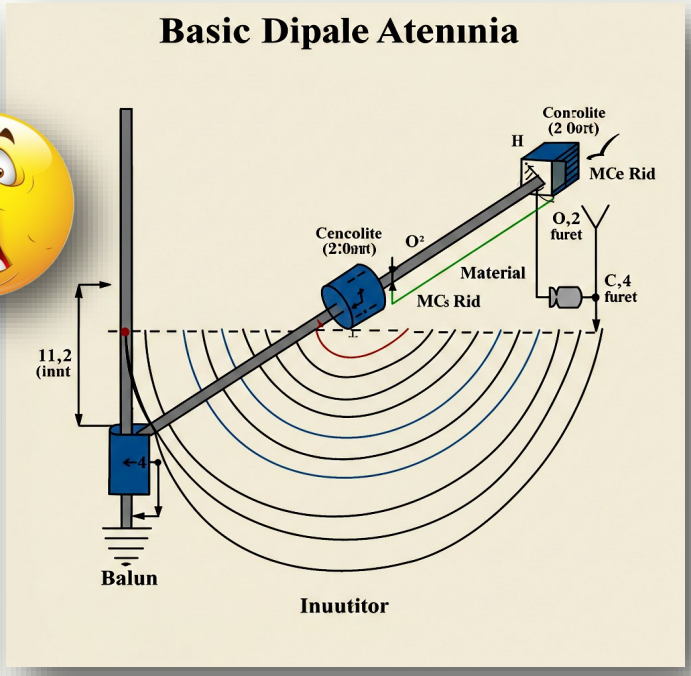
As my final effort to see what maybe ChatGPT could do, I simply asked it **"Draw a schematic of a basic dipole including the antenna wire, center insulator, and coax feedline. Make it be very technical, logical, and easy to read"**

And this is what I got in return:



Bill then took my question, and fed it verbatim into Gemini, and this is what he was presented with:





RETURN TO HOME PAGE

email loggersbark@gmail.com

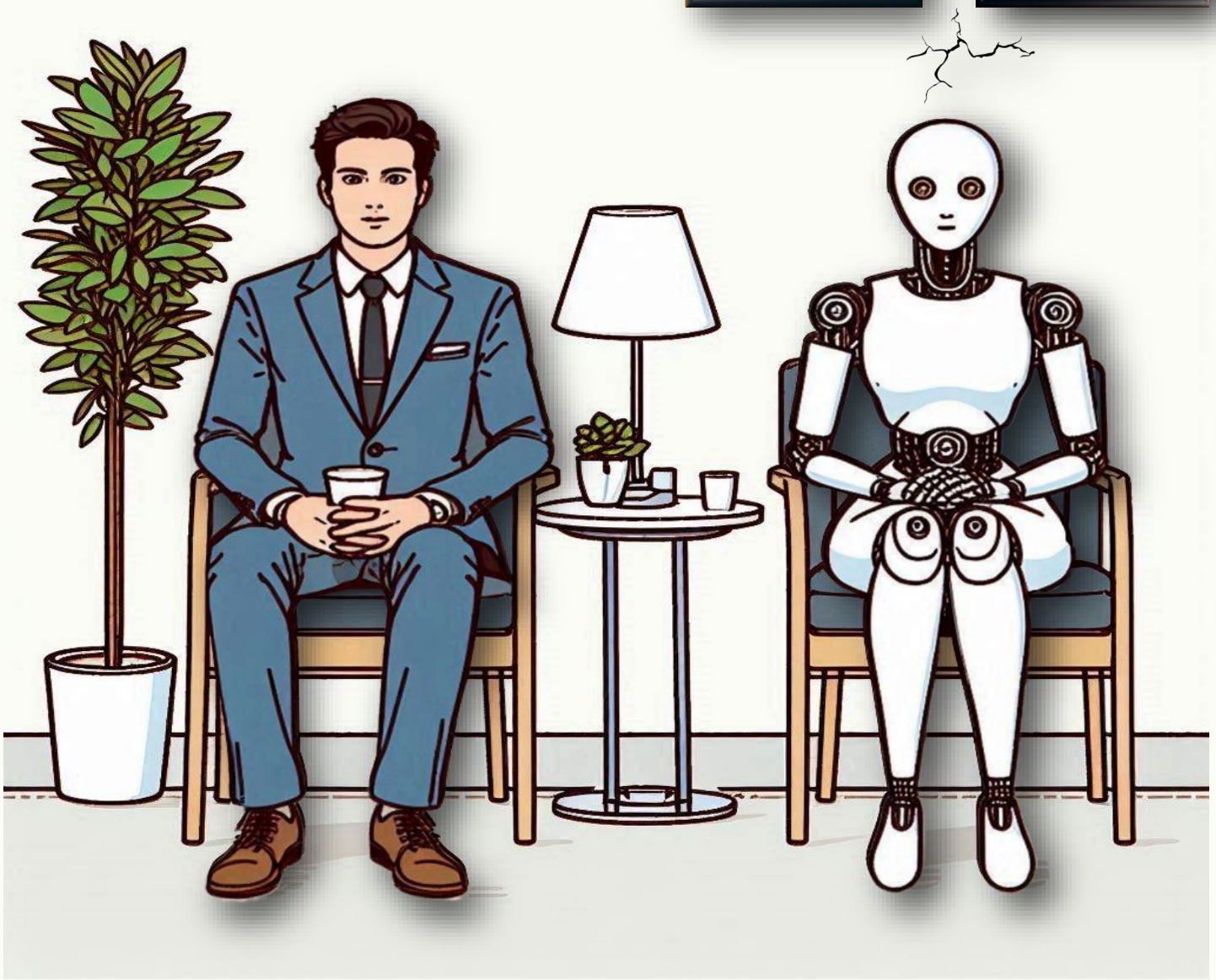


SO AS YOU CAN SEE FROM THESE RIDICULOUS EXAMPLES, AI has a *very* long way to go before you can rely on accurate technical answers to simple questions. At least this is the case today, using the AI engines that are commonly available. I don't doubt for a minute that the technology will get there one day soon—but it's not there now. For the rest of my term as Editor, I'm happy to accept submissions from humans, but robots need not apply for the job. I'm not hiring.

-Dave W7UUU







HAM RADIO WORLD NEWS

Amateur radio events from around the world

Web

FRIEDRICH MERZ, DK7DQ, HAS BEEN ELECTED AS GERMANY'S NEW CHANCELLOR

This even marks a notable moment for the amateur radio community. While Merz is not widely recognized for on-air activity, his status as a licensed ham operator adds him to the distinguished list of world leaders who share our passion for radio. His election brings to mind figures like the late King Hussein of Jordan (JY1) and Thailand's King Vajiralongkorn (HS10A), both known for their engagement in amateur radio.

Merz, aged 69, is a veteran politician and leader of the center-right Christian Democratic Union (CDU). He secured victory in the February 23 election with 28.5% of the vote and is now tasked with forming a coalition government. Beyond politics, Merz is an aviation enthusiast who often pilots his own aircraft, a hobby that complements his technical inclinations.

Though his ham radio activity appears limited, Merz's ascent to the chancellorship is a point of pride for amateur radio operators worldwide. It serves as a reminder of the diverse backgrounds from which our community members hail and the shared interests that unite us

the world. ■ *-editor*



Friedrich Merz, DK7DQ, new German Chancellor

QRP LABS UNVEILS OFFICIAL SSB FIRMWARE FOR QMX/QMX+

QRP Labs is proud to announce the official release of firmware version 1_02_000, introducing full Single Sideband (SSB) voice capabilities to the QMX and QMX+ transceivers. This milestone marks the culmination of an extensive beta testing phase, delivering a powerful and flexible SSB solution for amateur radio enthusiasts.

The new firmware leverages advanced polar modulation techniques, enabling high-fidelity voice transmission through features such as Controlled Envelope SSB (CESSB), microphone Automatic Gain Control (AGC), compression, and both phase and amplitude pre-distortion. These enhancements ensure superior signal clarity and efficiency across all supported bands. Users can fine-tune their audio experience with comprehensive configuration options accessible via the QMX interface or terminal. A built-in microphone test tool assists in optimizing gain settings for various electret microphones, while the firmware's calibration routines ensure precise synchronization between phase and amplitude modulation paths.

The firmware also supports USB audio input, allowing seamless integration with PC-based digital modes. With CPU utilization remaining efficient even when all features are enabled, operators can enjoy robust performance without compromising system stability.

For detailed installation instructions and to download the latest firmware, visit the official QRP Labs SSB firmware page at this LINK.

Website: https://qrp-labs.com



QRP Labs QMX Transceiver

160-6m pocket-size multi mode 5w transceiver for under $200 shipped!



FIRST 630-METER BAND WORKED ALL STATES AWARDS ISSUED

05/01/2025

by Sierra Harrop, W5DX

Eric Tichansky, NO3M, of Saegertown, Pennsylvania, has been issued the first Worked All States award from ARRL The National Association for Amateur Radio® for the 630-meter band. He picked up the award at ARRL Headquarters in Newington, Connecticut, on April 21, 2025. That was the culmination of years of study, work, and experimentation.

Tichansky had a draw to 160 meters early in his ham radio career and was active in contesting and DXing on top band. When he moved to his current home, he was able to experiment with LowFER operation. When 630 meters opened to amateur use, he got straight to work. “It seemed like an unreachable goal at the time, but patience and persistence as well as gaining more and more of an understanding of the capabilities of the band over the years proved otherwise,” said Tichansky.

His transmit antenna system has been a journey in trial, error, and fire – he’s a member of what he calls the “Hall of Flames.” He says he “definitely learned that good quality insulators do make a difference.” After years of work and refinement of matching and loading techniques, his 67-foot vertical with 8 sloping toploading wires as a wire skirt over a large radial field have proven to be the ticket to success. “For reception, I have always used dedicated receive antennas which have included phased Beverages, a full-sized 8-circle vertical array, and various others like a terminated loop,” said Tichansky.

As news of the award achievement spread in the amateur community, even many long-time hams with little or no experience on 630 meters wondered how it worked.

Tichansky says Alaska and Hawaii proved especially challenging. “(The states) were certainly a challenge, Alaska perhaps more so. However, both locations had excellent resident operators and stations and through persistent attempts and the right conditions, two-way QSOs were completed. I have a few CW QSOs with K9FD/KH6 (SK) which still stand as the distance record on 630 for CW. I also have the overall distance record for a QSO with VK4YB via JT9 which took a long time and many attempts, finally finding success on a morning (US side) near the equinox,” he said.

Tichansky says there are several other operators right behind him, with WAS almost completed. In fact, ARRL Awards Branch Manager Sharon Taratula announced today that Edward Gray, WØSD, of Salem, South Dakota, has been awarded 630-meter WAS #2.

Most of the contacts on the band happen just like any other band, says Tichansky, from getting on and calling CQ or replying to one. Very few of his contacts on there were scheduled.

It takes an experimenter’s mind and a lot of patience to be successful on the band, but like with any other operating specialty, there is a community ready to help. “The 630-meter community is very diverse, but there are a number of members that come from particular backgrounds including microwave operations, EME, top banders and other weak signal communications. The thing we have in common is that we are experimenters and enjoy a bit of a challenge!” exclaimed Tichansky.

He currently has a DXCC total of 17 on the band. Tichansky plans to contribute technical articles about operating on 630-meters to QEX magazine in the coming months. All ARRL members have access to QEX and three other high-quality publications digitally.

Content ©ARRL, Inc.

THE MAILBAG

LETTERS To The Editor

W7UUU



Jonathan KK7PW (above) points to one of the stickers sent to him for being the first to identify the March Logger's Bark Hidden Object (a 1930 Champion sparkplug).

"The sparkplug image is at the bottom of page 61, to the right of Mr. Baekeland. BTW, I am a past Prez of the West Seattle ARC and many years ago (1997-98) I lived in University Place when I was on faculty at PLU. Not sure if the [RCT] clubhouse existed then, but sorry that I never made it to a club meeting. I hope to travel from West Seattle for a Saturday meeting. It would be great to see the shack!"

73—Jonathan *KK7PW*

Thanks for sending the nice photo of your shack—quite a shack it is indeed! We'd love to see you on any of the Saturday Open House days. The clubhouse is open most every Saturday of the year (check the www.W7DK.org website calendar) and we'd love to see you there. We have not only the HF Room with state-of-the-art rigs, but also the Doc Spike W7OS museum station, packed with legendary rigs from the past".

-73—Dave W7UUU

From QRZ:

Thank you Dave! I always look forward to the new issue. Keep up the fantastic work. Much appreciated.

-Russell *K2ZMM*

Dear Editor,

I am not a ham yet but I recently started reading your Logger's Bark magazine newsletter on QRZ and I just want to say thank you. I have learned so much from your articles and I'm surprised you can keep coming up with great new ideas every month like you do. Your club seems amazing too. Thanks for all you do and I hope you keep doing it.

-Jacob S.
Ankeny, Iowa

Thanks so much for the kind words, Jacob. Good luck if you go for your license. If ever near Seattle, please come visit the RCT!

-Dave W7UUU

THE MAILBAG

LETTERS To The Editor

W7UUU



Right: *Charlie Hoffman WD4CNO of Tampa Florida proudly shows off his W7DK Radio Club of Tacoma Logger's Certificate, number 697—the second to go to the state of Florida! Thanks for reaching out, Charlie, to get your own Logger's Certificate.*

-Dave W7UUU





Nicely done, Lad! And I can see you got the stickers I sent OK—thanks for the photo! -Dave

Dear Editor,

"I found the hidden picture of the Fahnestock clip! I hadn't looked before so I kept racking my brain about what to look for… whether to look for the exact image, or if you would hide it in some photo or if it would be in a header or something. I tend to overthink things sometimes so I pretty much went over everything that I could think of!"

[the purple arrow in the image at right points to the well-hidden clip beneath the lady's radio].

Nathan WA7BUG (ex-KK7QND)

"Oh and by the way, I used magic to make the stickers and cards stick together (it was lightly sticky green tape on the back but don't tell anyone!)" - Nathan WA7BUG

I promise I won't tell a soul!

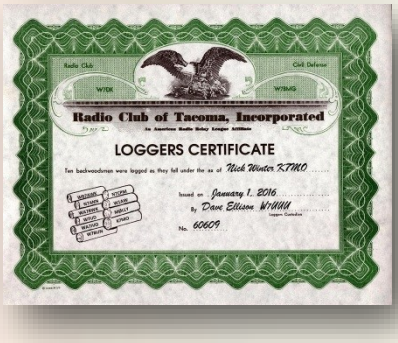
-73 Dave W7UUU

W7DK LOGGER'S CERTIFICATE

Classic "first award" for Members



HAVE YOU APPLIED for your own W7DK Logger's Certificate?! It's FREE and it's EASY! All you have to do is work at least 10 members of the Radio Club of Tacoma, then send in your list of call signs worked, and BAM! We'll print out your certificate and get it to you toot sweet by US Mail.



There are no confirmations required, no logs to submit, and really no rules other than the call signs you submit must be members of the club. You may work them on HF, 2m FM, on FT8 or SSB or any other mode! In fact, one of the best ways to get your 10 contacts is to check into the weekly Tuesday Night Net on the 147.28 club repeater… every Tuesday at 7:30 PM.

This venerable award was first launched in 1957, using certificate paper printed by club member Dick Ryan, W7RGD using a donated printing setup.

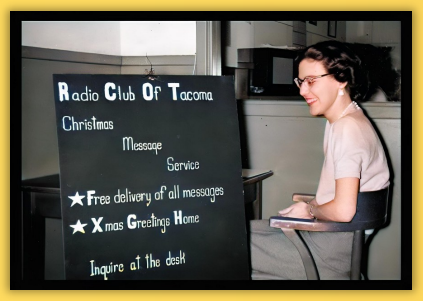
As of the date of this publication, there have been almost 700 certificates issued, including a few reissues over the years to replace lost certificates.

The original certificates were hand-lettered by long-time RCT member Barbara Osborne, W7UYL (SK 2022), and all of the records were kept in a series of recipe boxes still held by the club.

We still have a huge stash of this beautiful OFFICIAL logger's Certificate paper…. So if you do not already have yours, just shoot us an email with your list of call signs worked, and put "Logger's Certificate" in the subject line… ■ *-editor*

Wanna get yours? Send in those contacts!

Barbara Osborne W7UYL in 1955 an RCT USO event





We've just issued our first two outside the local area! (N6ACA & WZ4K)

W7DK LOGGER'S CERTIFICATE

SEARCH YOUR LOGS!!! GET *YOUR* CERTIFICATE!



THE W7DK RADIO CLUB OF TACOMA LOGGER'S CERTIFICATE is available to *anyone anywhere who has worked at least 10 members of the club*. It's a long-held club tradition to issue these certificates, with just shy of 700 having been produced since the start of the program in 1957.

Are you active on the HF bands? If you are, it's entirely possible you already have all the contacts you need to get your own Logger's Certificate! And it's really easy to search this.

Almost all modern computer logging systems have a way to search for the county of stations you have worked. For example, in the popular N3FJP Amateur Contact Log (ACL), to find stations that could possibly be W7DK members, just go to the "County" field in the ACL interface, enter Pierce County, then click "Search". If you have at least 10 results come back, send me the list and I will check to see how many are members!

For those who use QRZ's powerful logbook software, just open your main logbook, click the pulldown menu for "Filter" and select "New". In the "Filter Name" box you could call it "Logger's Certificate" (and then "save" if you want to use this rule in the future) - then in "Select Field" select "Their County", then for "State" pick WA for Washington, and lastly "Compare Value" set to "Pierce County, WA". Lastly, click "Add Rule". Once you do this, you will now see only those logged QSOs that the other station reported Pierce County. Since the Radio Club of Tacoma is in that county, your likelihood of pulling up club members is very high.

Regardless of the logging software you use, most should have a means for searching out county information.

Just note that if you find "Special Event" call signs such as W7F, W7B, etc., those don't count, as multiple operators share those call signs during the club's Bigfoot event every October. Only actual FCC-assigned call signs count for the Logger's Certificate. The club call of W7DK or the museum call of W7OS are considered acceptable to use.

Also consider filtering for Kitsap County (where I live) as we have a number of members there. You could also include King County, but I warn you: it's the largest county in the state, and has a lot of hams—most of whom will not be W7DK members. Searching there will result in a huge list without many "hits".

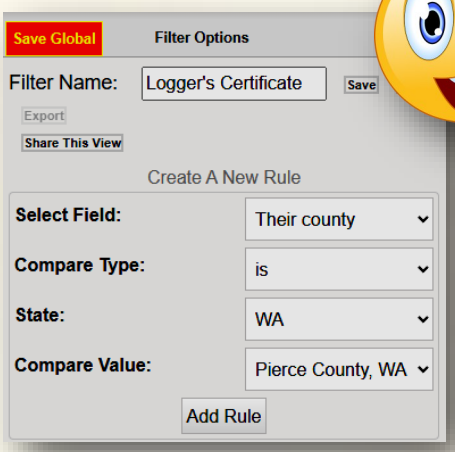
Wanna get yours? Send in those contacts!

Then just email me the list of calls—you don't need to include anything else: it's the Honor System. I won't be confirming anything other than if the call sign is (or ever was) a member of the club.

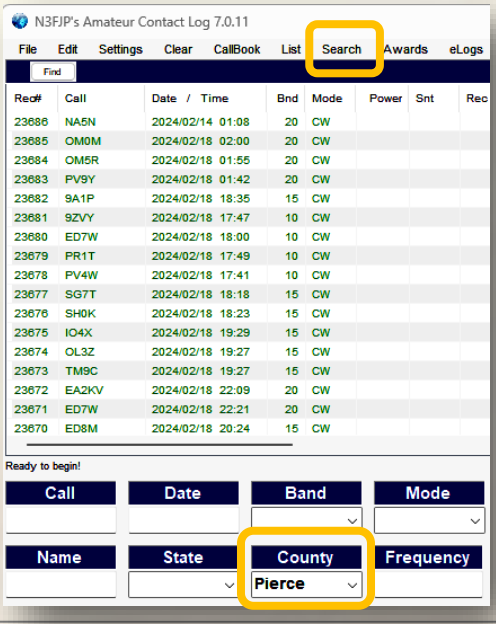
So start SEARCHING! I will send you your own beautiful Logger's Certificate free of charge—mailed to your listed QRZ mailing address. In return, just send me a photo of you holding your certificate and I will run that in a future issue of The Logger's Bark!

-Dave W7UUU





Above: *Custom Filter dialog for QRZ Logbook—just search for State=WA, and Value=Pierce (or Kitsap) County*



Left: *Using N3FJP Amateur Contact Log, simply enter Pierce (or Kitsap) for the County field, then click "Search" to see a list of calls from these counties*

RETURN TO HOME PAGE

email loggersbark@gmail.com

MEMBER SPOTLIGHT



Julie W7JUL

My initial interest in ham radio came from listening to my favorite radio talk show host, Art Bell W6OBB, back in the ’90s. He’d often tell his listeners that he’d be on 20 meters after the broadcast. I had no idea what that meant—20 meters?? I did a little investigating, and it sounded really cool, but I figured I could never learn Morse code, so I just forgot about it.

More recently, I’ve been focusing a lot on preparing myself and my home for self-sufficiency during natural or manmade disasters. Watching the government completely fail at communication and disaster relief was a real eye-opener. That’s what got me looking into radio again.

I found W7DK through a Google search and couldn’t believe I could get started with a Technician class for under twenty bucks! The bonus was finding out that CW was no longer a barrier—but an opportunity. I even talked a work friend into taking the Technician class with me. She didn’t come back for Day 2, but I was definitely hooked. I really enjoyed learning something outside my usual focus.

I think what pushed me to go for my General was how much I enjoyed being part of the W7DK community. Everyone is so welcoming and eager to share their knowledge and help me learn. Now, I’ve just finished my Extra class and am studying for the test, which I’ll take in June. After I pass, my next goal is learning CW. I’m also hooked up with a mesh node and learning about that as well.

ASK ELMER!

Mystery Elmer

Dear Mr. Elmer,

I found your column while reading on QRZ. I like your newsletter. It's pretty awesome.

I realize this might be a dumb first question, but I want to be upfront—I'm not currently interested in building my own ham radio setup and station and all of that. I received a Baofeng UV5R (yes, I know...) as a birthday gift, and my plan is to use it mainly for two things: First, as a backup for emergencies when regular communication systems might fail, and second, to keep it in my work truck so I can chat with local hams during in-state travel when things are slow on the job.

I've already taken care of getting my GMRS license and went through that whole process. Now, I'm looking to get the basic Technician ham license so I can legally join in on conversations. As I understand it, using my GMRS callsign on ham frequencies is a big no-no—and I definitely don't want to end up in trouble for that!

What should be my next step?

-GMRS Ham Guy

Dear GMRS Ham Guy

First, you are correct: you cannot use your GMRS callsign on ham radio frequencies, and you cannot transmit on ham frequencies without a ham license. The next step is to prepare for and obtain your Technician Class amateur radio license. This is the entry-level ham license and gives you access to all VHF/UHF amateur bands (including the popular 2-meter and 70-centimeter bands which your UV5R covers), and are useful for your desire for emergency communications purposes (although, please know the UV5R is not the greatest such radio—if your bankroll allows, consider something better like a Yaesu FT-60R which is vastly superior but only $139 new—click image at the right to view).

To get your Technician license, you'll need to pass a 35-question multiple-choice exam that covers basic radio theory, regulations, and operating practices. And you didn't ask, but just in case: there is no longer a Morse code requirement. All the possible questions are published online, and there are many free resources and practice tests available—websites like hamstudy.org and of course lots of books you can buy online at sites like Amazon. Most people can prepare in a couple of weeks with reasonably serious study. Once you're consistently scoring 80% or higher using online practice exams, you're ready to schedule your test. You didn't say where in the U.S. you are located, but Google "Ham radio clubs near me" and you will find places where you can take your actual test.

After you pass, you'll receive your own unique ham radio callsign—use this on all amateur frequencies. Your GMRS license and callsign remain valid only for GMRS frequencies and equipment; don't mix the two. Once licensed, you'll be able to use your UV-5R to legally join local ham conversations, access repeaters, and participate in emergency nets (assuming you have one in your area, and that your UV5R can reach the repeater).

So keep using your GMRS setup as you have been, but study for and take the Technician exam to unlock legal ham radio privileges. Once you're licensed, you'll be able to fully enjoy your Baofeng for both emergency backup and social communications on the ham bands. Welcome to the hobby!

-Mystery Elmer #3



***No affiliation**—but the Yaesu FT-60R is a fantastic first dual-band HT and vastly better than a UV5R*

THIS MONTH'S CALENDAR

W7DK

May | **June, 2025** | July

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
23	1 08:00am SEA-PAC	2	3 07:30pm 2 Meter Net 147 ...	4 07:00pm Board meeting	5 06:00pm HF Night at the ...	6	7 08:00am Technician Clas ... 10:00am Open House
24	8 08:00am Technician Clas ...	9	10 07:00pm VE License Exam ... 07:30pm 2 Meter Net 147 ...	11	12 06:00pm HF Night at the ...	13	14 10:00am Open House 01:00pm General meeting ...
25	15 10:00am POTA Illahee St ...	16	17 07:30pm 2 Meter Net 147 ...	18	19 06:00pm HF Night at the ...	20	21 10:00am Open House
26	22	23	24 07:30pm 2 Meter Net 147 ...	25	26 06:00pm HF Night at the ...	27	28 10:00am Open House



Click map to view on W7DK.org with current active links!

Did You Know??

Unlike the Northern Hemisphere, where June signals the *start* of summer, the Southern Hemisphere experiences cooler temperatures, shorter days, and crisper air during this time. Snowfall is common in the mountainous regions of New South Wales and Victoria, drawing skiers and snowboarders to popular resorts. In cities like Melbourne and Hobart, winter brings chilly mornings and frosts. Despite the cold, many Australians embrace the season with winter festivals, warm foods, and cozy gatherings, making June a refreshing shift in the yearly cycle.





IN 1966 MARGIE CHAVIS, K7AMJ (SK) put together a wonderful

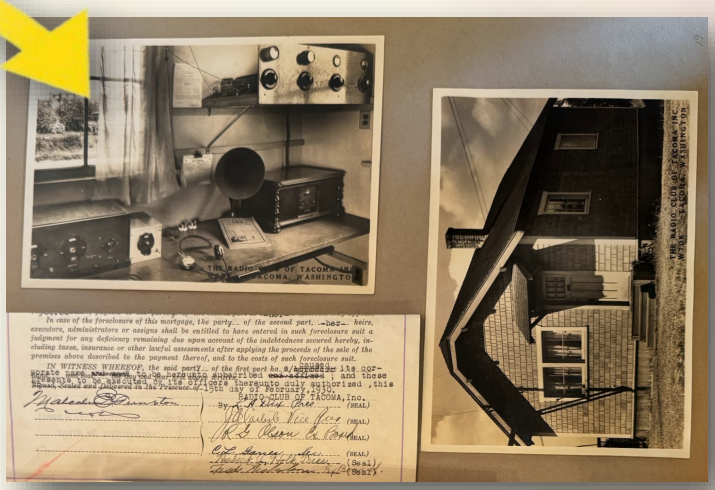
50th Anniversary

scrapbook of W7DK club news clippings, notable events, photos, etc. This monthly column will run for just a few issues, and feature selected items from the scrapbook just for a glimpse into the club's past. Even those readers who are not a member will still find enjoyment in reading about historical ham radio tidbits from more than half a century ago.

–editor

MOST MEMBERS OF THE RADIO Club of Tacoma know we own our own clubhouse building, and have since 1957. But what many don't know is the club actually owned a house long before that date. The 860 square foot house at 1462 South Oakes street in Tacoma was the first clubhouse. Note that in many old club notes, the address is erroneously listed as 1426—transposing the digits. In the photo at the right is the signature section of the purchase contract, dated February 15th, 1930, when the house was only two years old! I couldn't locate a purchase price for this 800 square foot home at that time. However it last sold for a whopping $381,000 a year or so ago—obviously it was a tiny fraction of that amount back then! In the years prior to 1930, the club met in various North Tacoma homes. But the Oakes street clubhouse had to be sold during the Great Depression. It wasn't until 1957 that the RCT could afford to buy a new clubhouse. Click any of the photos to see them full size (except the new one, but clicking that will take you to the Zillow listing).

-Dave W7UUU







Original clubhouse as it looks today. Click to view more.
Photo credit: Zillow.com

RETURN TO HOME PAGE

email loggersbark@gmail.com

TAKE ME OUT TO THE BALLGAME!

TACOMA RAINIERS THURSDAY JULY 24TH

AH! THE SOUNDS OF SUMMER: THE UMPIRE YELLING "PLAY BALL!", the smack of a ball hitting a mitt, the vendor shouting his spiel. Ah yes—baseball. You just gotta love it.

Here's your chance to hang out with your Radio Club peeps and enjoy an evening of America's pastime right here in Tacoma! Join us on Thursday, July 24th at 7:05 PM as the Rainiers take on the Round Rock Express at Cheney Stadium.

To purchase tickets: follow the link on the Club's webpage. You'll have two options (price includes all fees & taxes):

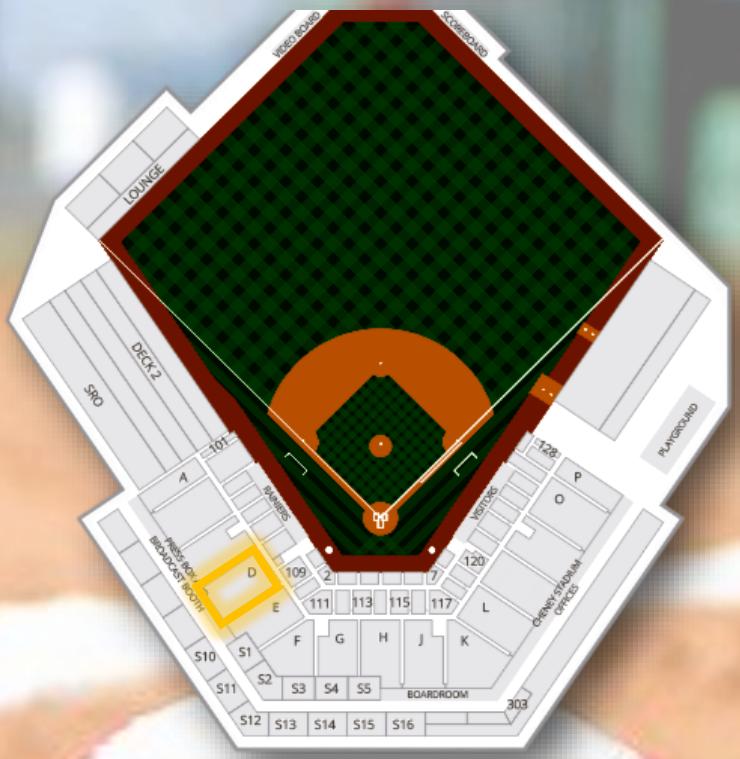
- $18.83 gets you a reserved seat in Section D on the third-base side plus a classic ballpark meal.
- $30.41 includes the same seat and meal plus a stylish Tacoma Rainiers cap.

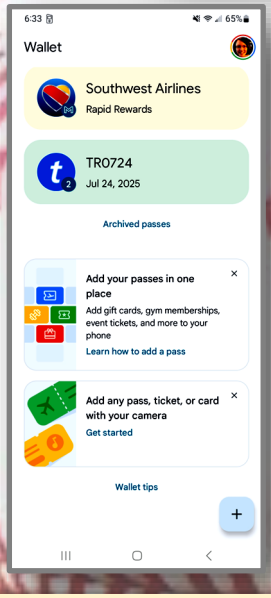
Once you've purchased your tickets, you'll get an email from FEVO Enterprise with a yellow button labeled "Access Tickets Online." Be sure to open it from a smartphone and save that email—just in case.

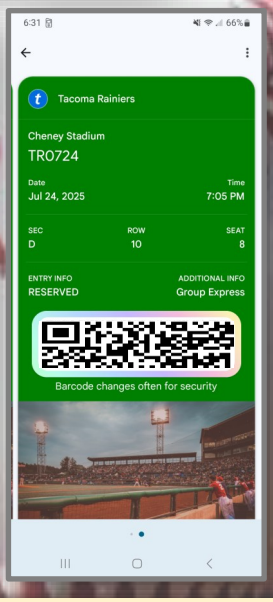
If you already have a Ticketmaster username and password, great—it'll save some time. If not, you'll have the option to create one. Yeah, I know… it's hard to avoid Ticketmaster these days.

You should now be on the Rainiers' Ticketmaster page. In the upper left corner, tap the three bars to open the menu, then tap "My Tickets", which will load "My Events." Scroll to the bottom and tap "View Event Details." At the bottom of that screen, tap on Section D, Row, and Seat—and eureka, there it is!

It's best to save the tickets to your phone's Wallet app in case of slow Wi-Fi at the stadium.







Top: Cheney Stadium—RCT is in Section D—click image to go to the Cheney Stadium webpage for address, etc.
Left: The blue circle will indicate your ticket purchase
Right: The QR code for the actual ticket that will display on your phone (Android or Apple)

Got questions? Contact me:
Email: Al – N7OMS@MSN.COM
Phone: 253-495-9068 (Text me first so I know it's not a spam call.)

73—Al N7OMS

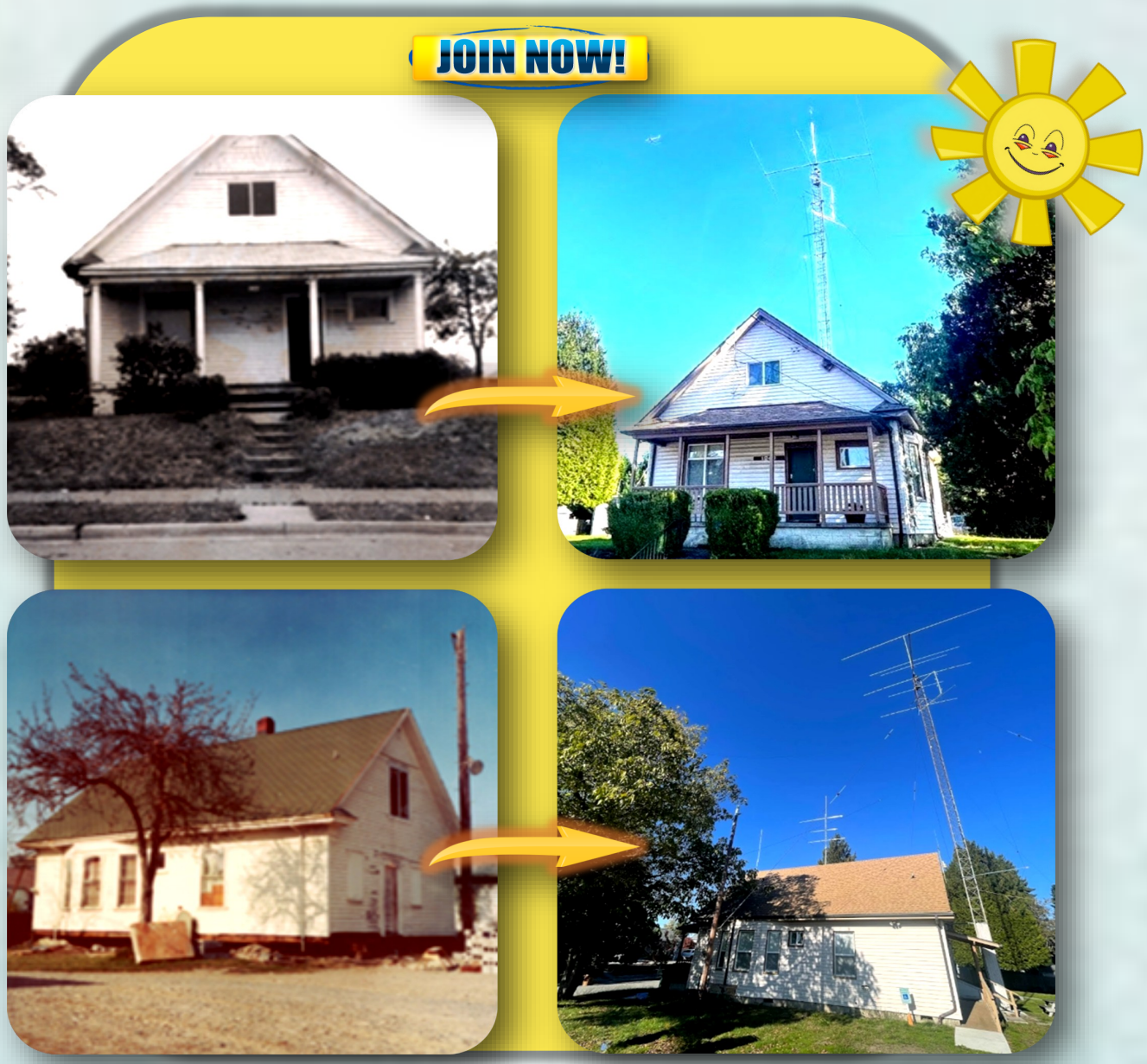
AROUND THE CLUBHOUSE



But first.... A little *about* the Clubhouse

THE RADIO CLUB OF TACOMA IS UNIQUE not only in its age (continuously operating since October 1916) but also in its ownership of an actual clubhouse and adjacent parking lot. The current clubhouse was purchased by members in 1957 (the previous clubhouse was purchased in 1927!) and has been maintained on this site ever since. But it takes time, talent, and treasure to keep this dream a reality. Club membership is one of the solid ongoing means with which the club maintains not only members to help with the upkeep, but to also raise the capital that's required to keep our clubhouse in tip-top shape.

If you are not yet a member, please consider joining—even if you're not local! If you enjoy reading The Logger's Bark from afar, you can be a part of our club just as if you were here. And if you are a local, please consider contributing your own skills and effort to keep this club the wonderful thing it is. Ask any officer how you can help. Thanks to all our loyal members! *-Dave W7UUU*



Photos on left from RCT Archives—photos on Right by Dave W7UUU

RETURN TO HOME PAGE

AROUND THE CLUBHOUSE

Recent Photo highlights from the Clubhouse







Measuring for the new DATV antenna setup



Club President Adam W2NCC puts his ladder where his words are—and ascends 25 feet up one of the club's auxiliary supports to remove a no-longer-used dual band VHF/UHF vertical, and replaces it with directional high-gain DATV antennas to join the local DATV network . On top is the 1.2G downlink with the larger 440 uplink on the bottom.

All photos this page provided by Dave W7UUU

AROUND THE CLUBHOUSE

Recent Photo highlights from the Clubhouse





Jeff KB7QAG presents his wares at a recent Mini Swapmeet Saturday



Paul N7OSS evaluates a "Cricket-40 QRP Transceiver" kit for possible use as "group build project"



Anne N7ANN chats it up with President Adam W2NCC



Club Secretary Gary WG7X signs in on a recent Saturday Open House

Got pictures from the clubhouse? Send 'em in!

All photos this page provided by Dave W7UUU

AROUND THE CLUBHOUSE

Recent Photo highlights from the Clubhouse





Ellen AI7FP waves "hello" from the Lou Room



Walt WA7SDY fires up the seldom-used Yaesu FT-847 to check in to the 40m Noontime Net



BJ KO7T claims his share of the fresh chocolate chip cookies generously made by Julie W7JUL for a Saturday morning Open House at the clubhouse



Stephen AD7AB works out a patch bay setup for putting one of the HF stations on a particular antenna

Got pictures from the clubhouse? Send 'em in!

All photos this page provided by Dave W7UUU

AROUND THE CLUBHOUSE

Recent Photo highlights from the Clubhouse





"The Gang's all Here" in the classroom on a recent Saturday Open House



Stephen AD7AB (left) tours visitor Shelby KK7WLO



Brad KK7YQC yucks it up with Paul W7PFU



Sorry Paul but that facial expression deserves its own presentation!!

Got pictures from the clubhouse? Send 'em in!

All photos this page provided by Dave W7UUU

AROUND THE CLUBHOUSE

Recent Photo highlights from the Clubhouse





Jeff W8NGS sorts out an NMO Mag Mount in the gear lockup



Nolan K7GBM always has a smile for anyone walking by!



John KI7YRC brightens the classroom with his very happy shirt!



The brand new bookcases in the DeMaw Library courtesy George K7GRS & Doug AD7AV

Got pictures from the clubhouse? Send 'em in!

All photos this page provided by Dave W7UUU

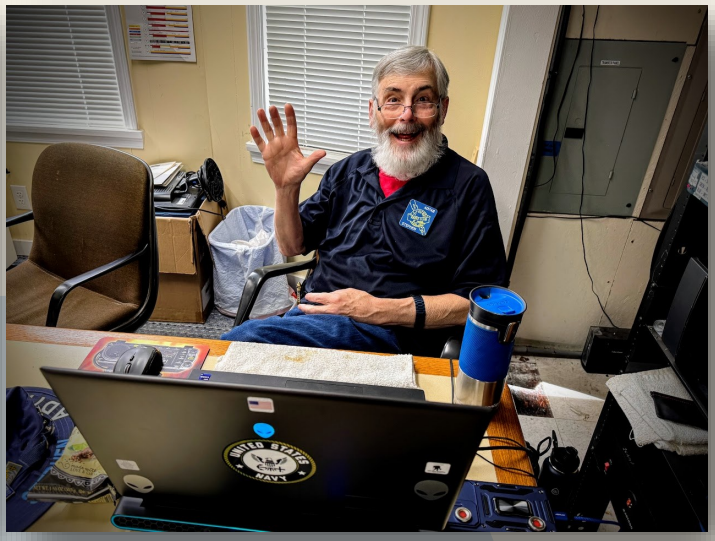
AROUND THE CLUBHOUSE

Recent Photo highlights from the Clubhouse





Rodney KM7AEW provides Meshtastic technical guidance to Ron KD7QKU in the classroom



Hanging out in his usual spot in the Lou room, Stephen AD7AB waves to the cameraman!



Mike W7MKE focuses on learning to program" his FT-991 in the classroom on a recent Saturday



Wade W7ITL sets up the first WWATS DATV test transmissions from the RCT RF Lab—using the newly installed up & downlink DATV Yagi antennas

Got pictures from the clubhouse? Send 'em in!

All photos this page provided by Dave W7UUU

AROUND THE CLUBHOUSE

Recent Photo highlights from the Clubhouse





Anne N7ANN visits with Bob K7MXE at a recent Open House Saturday



The Editor is warmly greeted by Mike W7XTZ, Greg KT1A, and Wade W7ITL



Mini Swapmeet Day!



Walt WA7SDY explains operation of a Nano VNA to an interested potential buyer

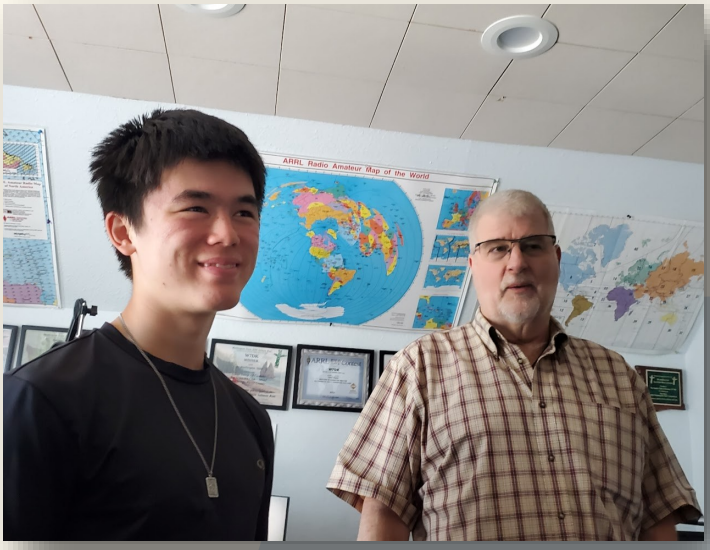
Got pictures from the clubhouse? Send 'em in!

All photos this page provided by Dave W7UUU

AROUND THE CLUBHOUSE

Recent Photo highlights from the Clubhouse





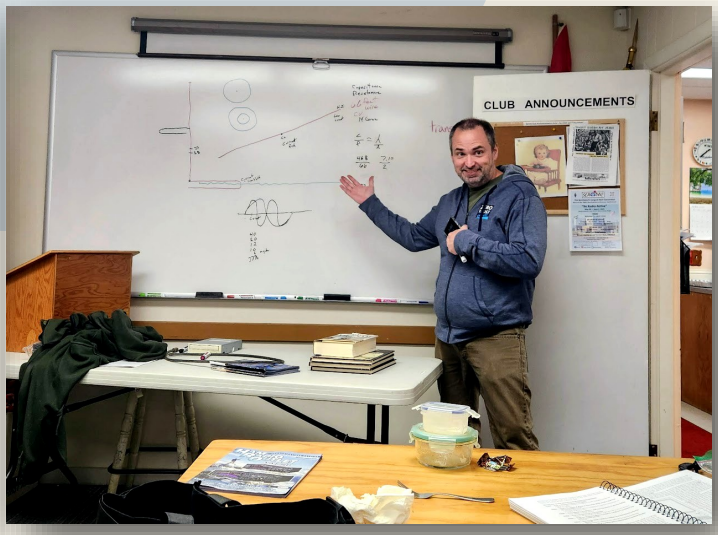
Visitors Ezra KK7BAF and Rob (no call yet) hanging out in the HF room—photo by Mike W7MKE



Visitors Tim KF4EDG and Ron KM7AEX stopped by the clubhouse—photo by Mike W7MKE



Julie W7JUL catches up with John N7TES during an Open House Saturday -photo by Dave W7UUU



"Hi Mr. Editor! I took this picture last night of Dave W7GEL in our Extra Class. Instructor Dave N7HT forces us to go draw things in every class session to make sure we learn it" - photo by Julie W7JUL

Got pictures from the clubhouse? Send 'em in!



RETURN TO HOME PAGE

email loggersbark@gmail.com

AROUND THE CLUBHOUSE

Recent Photo highlights from the Clubhouse



W7DK

June Birthdays!!

Call Sign	Name
AF7HQ	Kirk Parker
K7BTC	Brad Cullen
K7OG	Don Hatlestad
KB7FD	Buzz Dean
KB7TNT	Timothy Tasse
KC7AFO	Mark Rader
KC7EQ	Angela Korn
KG7ONN	Lucy Key
KG7RKC	Ronald Carper
KI6QXV	Paul Petach
KJ7YSX	Lal Chandwaney
KK7NKL	Laura Moody
KK7VHJ	Sydney Hannum
KK7YQC	Brad Cunningham
N7PKG	David Burke
No Call	Brian Terjerson
W0XO	Jonathan Haynes
W1COL	Howard Lim
W7MKE	Mike Drorbaugh
W7SSN	Billy Stockho
W7UUU	Dave Ellison
W7XTZ	Mike Mikuchonis
WS7A	Billy Byers





Happy Birthday, Mike W7XTZ!



Hapy Birthday, Brad KK7YQC!

photos by Dave W7UUU



MOST EVERY THURSDAY EVENING from 6PM until 9PM, the Radio Club of Tacoma opens the HF room for one-on-one training time. Saturdays are a great time to come see the clubhouse and socialize, but often it's tough to get "quality time" with the radios. This weekly event is open to all—members and non-members alike. There is always at least one Extra Class operator on hand with a solid knowledge of the Icom and Flex radios in use, as well as the antenna patch bay, amplifiers, and tuners. Even non-licensed "hams to be" can take a hand operating under the tutelage and watchful eye of an experienced "Elmer" on hand to show the ropes. Other nights, the club takes on build-it projects in the classroom—Come on by any Thursday!

■ *-editor*



Mike W7MKE & Julie W7JUL work on building a "Poor Man's POTA Performer" from a YouTube video… a vertical multiband antenna with 2 radials



Mike W7MKE & Julie W7JUL building antennas

Photo by Gary WG7X



Lee KF4EDG (left) & Jeff W8NGS fixing radios in the RF Lab

Photo by Gary WG7X



Open House Reminder!

THIS IS JUST A WELCOMING & REMINDER that the W7DK Radio Club of Tacoma Clubhouse holds an open house on most Saturdays of the year (click HERE for exclusions) from 10:00 AM to 2:00 PM. There's always a nice group of members but ALL visitors interested in amateur radio are welcome to stop by! You do not have to be a member or even a ham to visit us. Please be sure to sign the Visitor's Logbook in the kitchen, say hello to your Clubhouse Host, have a cup of coffee and a donut (always a nice assortment on hand). You may wander the building—visiting the classroom, the downstairs "shack parlor" we call The Lou Room, and of course upstairs to see the main HF room and the W7OS Doc Spike Memorial museum—a living collection of vintage gear that regularly gets on the air.

The last Saturday of every month, we hold a mini flea market where members can sell their ham gear. But even non-members are eligible to dicker for deals and take home gear. And starting around 11:30, our club Chef Paul W7PFU serves up free chilidogs, or sometimes burgers or spaghetti at the chef's whim. We hope to see you stop by soon!
■ *-editor*



Mini-Swap Meet Monthly

DO YOU HAVE EXCESS GEAR TO SELL? Members of The Radio Club of Tacoma have a little perk every month with our own mini Swapmeet held in the clubhouse on the last Saturday of each month. No charge for a table—just bring your wares and set up shop! Non-members and visitors are free to stop by and see if they can pick up bargains. The club also has gear donated regularly that is made available to visitors and members alike, available for purchase via donation. And of course, as mentioned in the Open House reminder, the club chef Paul W7PFU cooks up chilidogs or spaghetti (whatever suits his mood!) at no charge for guests. ■ *-editor*



RETURN TO HOME PAGE

email loggersbark@gmail.com

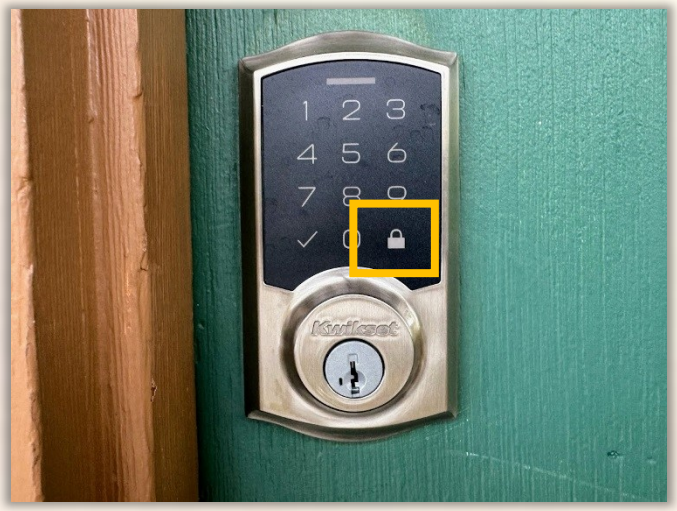


How To Lock The Doors

AS WAS REPORTED in last month's Bark by our club Secretary, Gary WG7X, in recent months there have been reports of the clubhouse being found unattended and the doors not even locked! Obviously, this is not acceptable. It's the responsibility of the Club Hosts on Open House Day (Saturday) or those who have door and alarm codes on other days to make certain the building is secure when leaving.

But should you be in the position of being the "last one out", you can still LOCK THE DOOR even if you don't have the code or a key. Simply pull the door closed and push the "lock symbol". The battery-powered mechanism will then lock the door (you won't be able to get back in without the code!). This applies to both the front door and the back door. See photo below—note the "lock" button.

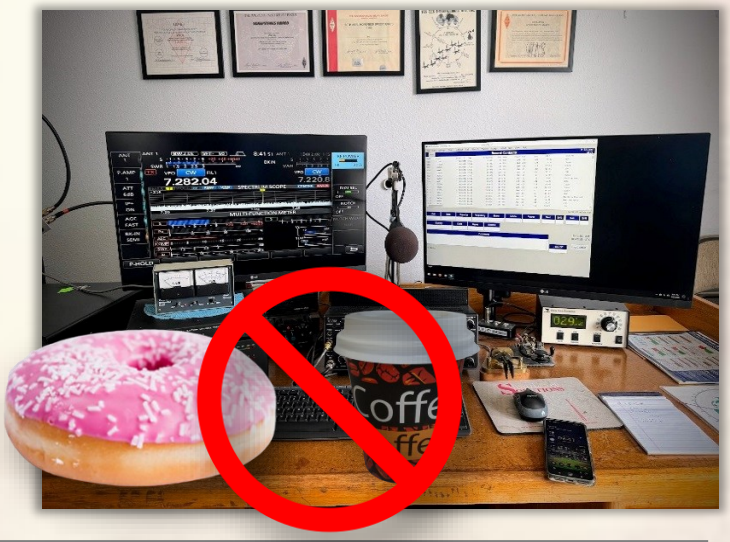
-Dave W7UUU



Help Keep The Clubhouse Clean

THIS IS JUST A GENTLE REMINDER that the W7DK Clubhouse is for all members to use and enjoy, and is a place to put our best foot forward as a club for visitors we welcome in almost every Saturday of the year.

Please be mindful of leaving trash, empty cans or bottles, food wrappers, McDonalds bags, and whatever else. Same holds for coffee cups… we frequently see cups left on classroom tables, the kitchen counters, at the Lou Room table, and wherever else. Please just make sure to "pick up after yourself". Also, remember that liquids and radios don't mix. Please don't take cans or cups of beverages into the HF room or the Museum—just water bottles with lids or closures of some sort. And no "sticky foods" like donuts! No one wants to reach for the tuning knob only to find your sticky donut residue on it!



THE FRUGAL HAM

Ham Radio on a Budget

IN KEEPING WITH LAST MONTH'S FRUGAL HAM column, this month I again present a super reasonably-priced all band, all mode HF transceiver for under $200! It's even as low as $125 if you are good at building kits.

If you want to save a lot of money, and you enjoy rolling up your sleeves at the workbench, the QRP Labs QMX+ transceiver would be an awesome project for a "Frugal Ham" - even if you buy it pre-built instead of in kit form.



QRP Labs QMX+ 160m through 6m all-mode transceiver Only $125 in kit form or $185 assembled (less case). Photo by QRP Labs

The QMX+ is a kit transceiver, available from QRP Labs (run by Hans Summers, G0UPL). Hans is truly one of the innovators in ham radio today, designing some of the most amazing QRP transceiver kits on the market. I own several of them myself, and they're really fun to use. But the QMX+ is the first offering from QRP Labs that's all bands, all modes, in one box.

For the hands-on crowd, the unassembled QMX+ kit is currently priced at $125 USD (not including enclosure—that's $25 extra but you can certainly build your own if you're handy with metal work or even a wooden or 3D printed box to put it in). That's for the main board, parts, and all the hardware needed to build it yourself. If soldering's not your thing or you're short on time, a fully assembled and tested version is available for $185 USD—which is a real bargain in the world of compact SDRs.

Many builders opt for the case, not only for protection but also for the finished look it gives the radio. But Hans posts on his website link CAD drawings you can use to *build your own box* or even boxes for accessories you want to pair with your QMX+.

At its heart, the QMX+ is a direct conversion SDR transceiver that uses a clever digital signal synthesis technique rather than a traditional mixer/IF design. It was designed primarily for CW, as well as digital modes— FT8, JS8Call, RTTY, Olivia, WSPR, and more. In fact, it pairs exceptionally well with programs like WSJT-X and FLDigi, and it includes a built-in USB interface for CAT control and audio. There's no need for an external sound card or interface—just plug it into your computer and go.

But here's the big recent news, as I reported in this month's Ham Radio World News section of *The Bark*: SSB support has just been released in the firmware! Yes, QRP Labs announced that as of the latest firmware update, the QMX now supports single sideband voice operation. (Using an external mic… there is an internal mic on the PCB apparently,



but according to the press release, that's not yet supported). That turns this formerly CW/digital-only rig into a viable QRP SSB voice transceiver, opening the door to those non-CW folks who don't care for digital modes either.

The QMX+ has full band coverage from 160 through 6 meters, with CW & FSK Digi modes (WSJT-X modes), as well as USB/LSB in the latest firmware issue.

There are a ton of built-in features as Hans is famous for in his designs. Here's a listing of all the key features as posted on his website.

List of Features of the QMX+

- Full 160m to 6m band coverage
- CW, FSK Digi, and SSB (USB/LSB) modes
- All features of QCX+ (VFO A/B/Split, RIT, Message and frequency memories, beacon mode, keyer, etc.)
- 3-5W output at 12V supply (can be built for 3-5W at 9V supply)
- SWR bridge built in
- Internal RTC powered by the common CR2032 coin cell battery (battery not included)
- Single signal digi mode transmission (zero unwanted sideband, zero residual carrier, zero intermodulation distortion)
- Solid-state band switching and transmit/receive switching under CAT control
- High performance embedded SDR SSB receiver with 60-70dB of unwanted sideband cancellation
- Built-in 24-bit 48ksps USB sound card
- Built-in USB Virtual COM Serial port for CAT control
- Si5351A Synthesized VFO with 25MHz TCXO as standard
- Easy to build single-board design, Professional quality 6-layer, through-hole plated, silk-screen printed PCBs

Features list continued:

- All SMD components factory assembled
- Connectors: 2.1mm power barrel connector, USB-C (for audio and CAT control), BNC RF input/output, 3.5mm jacks for audio out, paddle/GPS/mic/PTT in, and PTT out
- Built-in test signal generator and testing tools
- GPS interface for frequency calibration, real time clock and location (internal WSPR beacon)
- IQ output mode for use with SDR software
- Switched mode regulators Receive current 80mA, Transmit current 1.0-1.1A for 5W output with 9V supply (around 0.7A for 5W with 12V supply).
- Internal microphone ready for the future SSB firmware
- 11 GPIO ports including a 3.5mm stereo jack socket on the rear panel labelled "AUX" that may be configured as a serial port
- Optional aluminum extruded black-anodized enclosure

Output power is adjustable, typically in the 4 to 5 watt range, depending on band and supply voltage. It runs off a standard 12V DC input—NOTE (and very important note): that does NOT mean 13.8v so you will want to use an inexpensive "Buck Converter" from Amazon or other online source to turn your 13.8v shack supply into a true 12-volt supply—or just run it off a 12-volt battery. Regardless, the finals cannot tolerate higher than 5 watts output so don't try to hotrod the QMX+ to exceed that limit.

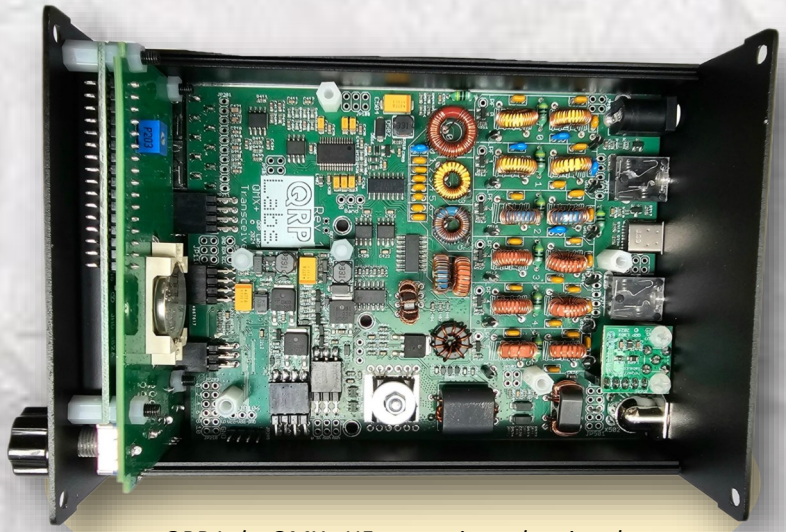
The QMX's user interface is reasonably simple and more-or-less intuitive, especially considering it only has a small OLED display and a few buttons. Band and frequency changes are made via a rotary encoder, and a menu system that allows tweaking settings like CW keyer speed, filter width, and more. Firm-



ware updates are fairly easy and encouraged—especially with new features like SSB being added.

How hard is a QMX+ to assemble and test?

If you're reasonably comfortable with soldering small components and following instructions, the QMX is a rewarding build. QRP Labs does a great job with the assembly manual, and the parts are well-labeled and logically arranged. That said, this is not a "snap-together" kit. It involves winding a fair number of toroids—20 in total, including two "binocular" core transformers—see photo at center. There's lots of careful soldering of a lot of through-hole components required, often in tight spaces. It's not a kit for anyone with unstable hands or limited kit building experience. However, all of the SMD devices are preinstalled even in the kit version so at least there's that.



QRP Labs QMX+ HF transceiver, showing the main PCB. Photo by QRP Labs.

Fast, experienced builders report the entire process taking 4 to 6 hours. But it's probably more along the lines of 8 or 9 hours for most builders.

If that sounds daunting, the pre-assembled version is a nice compromise—you still get the QRP Labs experience without the risk of building errors. Due to the density of construction, most QRP Labs kits are fairly difficult to service after building. That's why the manual has "test as you go" instructions, and there are even built-in testing circuits that you build as you do the assembly..

The QMX isn't trying to be a shack-in-a-box. It doesn't have a waterfall display, an internal speaker, or a built-in antenna tuner. But what it does offer is exceptional value, performance, and flexibility for the QRP operator.

Thanks to its compact size and low power draw, it's a natural fit for portable ops like POTA and SOTA activations or QRP field day experiments. And with SSB now in the mix, it suddenly becomes much more versatile.

Is it going to replace your 100-watt HF main rig?

Probably not. But as a second rig, portable companion, or digital mode workhorse, the QMX+ is a tiny powerhouse that continues to get better with each firmware revision. I don't currently have a QMX+ in my own shack lineup but plan to have one up and running by the end of the year.

-Dave W7UUU



I FIRST ENCOUNTERED ART BELL AND HIS *COAST TO COAST AM* radio show sometime in the late 1980s, while working a graveyard shift for ADT Security Systems. My nightly hour-long drive from Fircrest, WA to the Kent Valley to string miles of security and fire alarm wire in new "concrete tilt-up" warehouses being built there by the dozen allowed for lots of time to listen to late-night radio. It was only much later I learned he was also a ham radio operator with the call sign W6OBB.



While his earlier show content beginning in 1978 (then called *West Coast AM*) was centered on political commentary, some ten years later Bell found his stride by delving into conspiracy theories and the paranormal, topics which made him a celebrity. At its peak, the now-renamed *Coast to Coast AM* show was syndicated on over 600 AM radio stations, literally "coast to coast".

At the time, I fully realized many of his topics and guest speakers were pure hokum, but his presentation style was always entertaining regardless. We hear talk of "fake science" fairly often today, but it could be argued that Bell and some of his talk-show guests truly pioneered that art! According to State University of New York professor Paul Arras, those earlier shows hosted by Art Bell featured guests that "*were frequently pseudoscientists, but regardless of their reputation, all guests were presented by Bell as experts*". He went on, "*Bell seems to believe much of what even his wildest guests say*".

According to Boston College professor Michael C. Keith, a "*characteristic of distrust and fear is a part of the text of Coast to Coast—fear of the unknown, fear of [alien] invasion, fear of being taken over by some kind of evil force*".

But all of that aside regarding his profession, Art bell was also a long-time serious amateur radio operator. He really loved the medium of radio itself—not just for entertainment but for "radio's sake". In many interviews, he made it clear that broadcasting was his job but amateur radio was his true hobby.



even though the two lines blurred.

Bell lived an hour outside of Las Vegas, Nevada, in a small town called Pahrump. Out in the desert, where the sky is big and the noise floor is blessedly low, Art built his dream station. In some ways, it was an "RF fortress" - fenced in on all sides to keep curious looky-loos at bay.

His call sign was W6OBB, and his vast antenna farm and KW station made him a world-wide powerhouse on the ham bands in every way his Coast to Coast AM show put him in vans like mine driving at 1:00 AM to a jobsite in Kent, WA … just different frequency bands!

His main station towards the end of his ham career was an Icom IC-7800, but he also operated a Yaesu FT-1000MP with the expected full contingent of accessories. I had heard him on the air any number of times over the years—but was never in a circumstance where I would be able to work him.

I finally had the pleasure of working Art on 20m SSB on February 8, 2017 at 22:55 UTC (3:55 PST). I was perusing the band on my Yaesu FT-950 and heard a booming SSB QSO in progress. It was between two hams, one being K7MIX. But once I heard the other station come back, I immediately recognized the voice from those couple of years of being a nightly Coast to Coast AM listener in my youth, and immediately knew who it was… W6OBB and just a few minutes later, he identified as such, on his return to the QSO.

I patiently waited for a suitable pause in their discussion, and sent "quick break" via my Yaesu hand mic into the FT-950, and was astonished to hear Art himself come back with, "Hello the breaking station—this is W6OBB". He was booming in 10 over S9, with such an imposing voice! I replied back, "W6OBB this is W7UUU—name here is Dave and I'm in University Place, Washington" (at that time).

His friend K7MIX in the QSO was very gracious, and said, "Hey Art I'll catch you later—go ahead and yak it up with W7UUU" and he signed off. So for the next 30 minutes, I was alone in the QSO talking with Art Bell himself and was delighted to have the discussion. We talked about his show, my discovering Coast to Coast all those years ago, and of course all



RETURN TO HOME PAGE
email loggersbark@gmail.com



about his shack and antennas and such. It's a QSO I will never forget.

Afterward, I immediately filled out and sent off a QSL card (at the time, he only exchanged paper cards). Alas, he had long been suffering chronic obstructive pulmonary disease (COPD) at a fairly advanced level (as a result of a lifetime of smoking cigarettes), and subsequently died just over a year later on April 13, 2018.

Art's call sign is now held by Mike Olsen as W6OBB, who is a big Art Bell fan who helps keep Art's legacy alive.

As for the Coast to Coast AM radio show, it carries on to this day as a top-rated late night radio talk show featuring topics that relate to the paranormal or conspiracy theories. The show is heard by some 2.5 million listeners each night, making it the most listed-to program in its time slot.

Since 2003, George Noory (not a ham) has been the host of Coast to Coast AM, following the retirement of Art Bell due to health issues. Other hosts fill in regularly on Noory's off days. But most who have been fans of the originator of the program consider Bell to be the pinnacle of the genre.

-Dave W7UUU


November 18, 1967 WEEKLY OKINAWA TIMES

Art Bell as a DJ at KSBK in Naha, Okinawa
Photo: Weekly Okinawa Times, November 18, 1967



7795	KH6LC	02/19/2017 02:11	40	CW	100	599	599	Hawaii	HI	LLOYD	Y	Y	SB-301 SB-401 - H
7794	WR7G	02/13/2017 04:25	10	SSB	100	59	59	USA	WA	Lynn	Y	N	IC-7300 - W7DK Ne
7793	K7MIX	02/08/2017 22:55	20	SSB	100	59	59	USA	NV	SCOTT	Y	N	In QSO with Art Bell
7792	W6OBB	02/08/2017 22:55	20	SSB	100	59	59	USA	NV	Arthur	Y	N	Arthur W Bell - 9041
7791	K7MAS	02/08/2017 04:01	2	FM	100	59	59	USA	WA	MARK	Y	Y	MARK A SANDLER
7790	KG7IHI	02/08/2017 03:52	2	FM	100	59	59	USA	WA	Leroy	Y	N	Leroy K Goldbecker
7789	CG6FS	02/08/2017 01:36	40	SSB	100	59	57	Canada	AB	Howard	Y	N	Howard Biederman

W7UUU Log Entry for W6OBB QSO… alas, he passed away before he could return a QSL



Radio Club of Tacoma W7DK 2025 Field Day Schedule

LOAD IN:

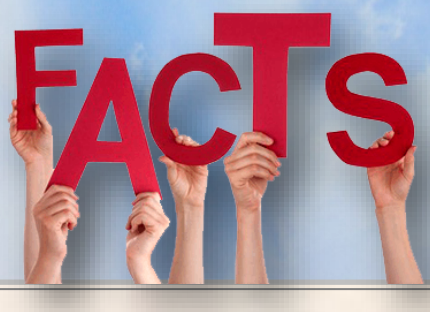
Friday June 27th: At clubhouse beginning at 9:00 AM. Setup at site begins at 11:00 AM

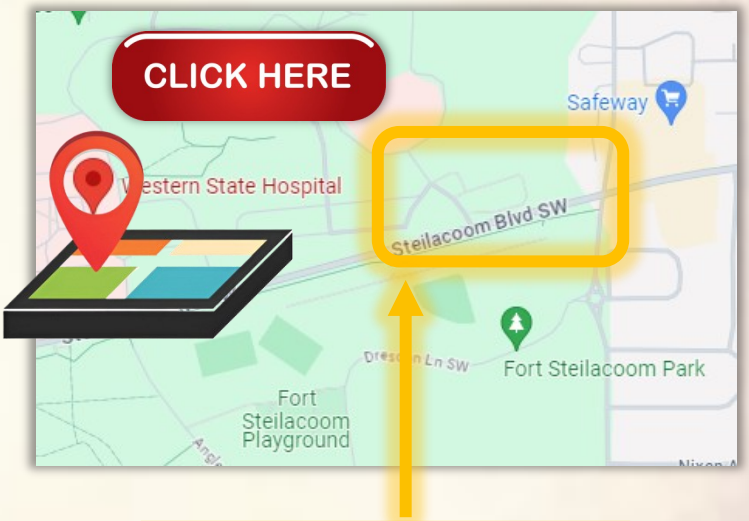
RADIO & PICNIC SCHEDULE:

Saturday June 28nd: 11:00 AM PDT the contest begins , running 27 hours ending at 13:59 PM PDT on Sunday. Stations must be set up prior to 11:00

LOAD OUT:

Sunday June 29: Load out begins after Logger's Breakfast—antennas at 2:00





FIELD DAY LOCATION:

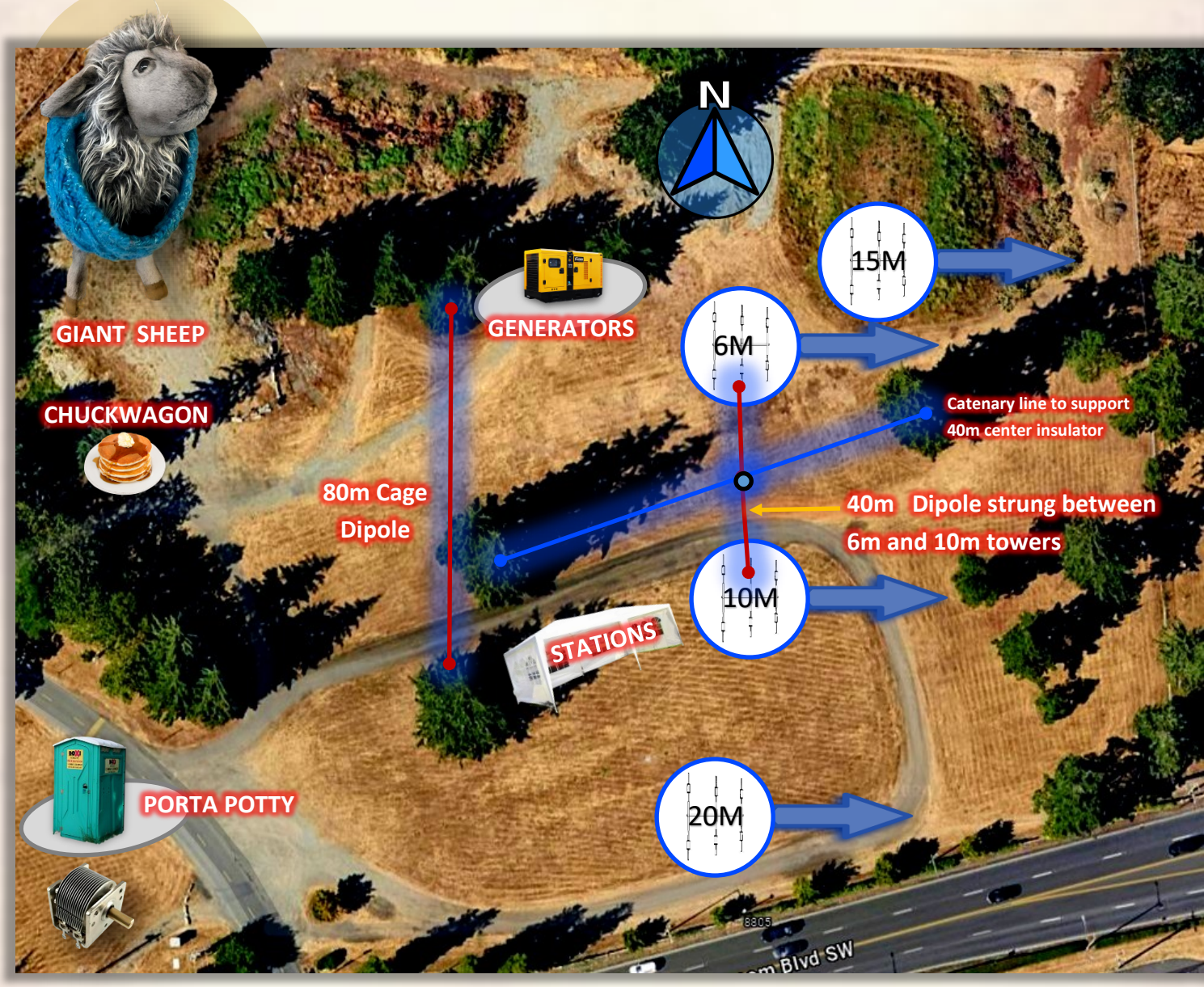
Western State Hospital
9601 Steilacoom Blvd. SW
Lakewood, WA 98498

Field day location is not actually inside the hospital entry gate but rather in the Eastern lawn area directly across Steilacoom Blvd. SW from the Fort Steilacoom Park and Playground area.

Note that despite being outside of the hospital facility proper, it is still a secured area. No drone flying or photography of the facility is allowed. No smoking or alcohol allowed. There will be W7DK personnel on site 24 hours a day for the duration of our stay.

W7DK FIELD DAY 2025

THE DETAILS YOU NEED



Radio Club of Tacoma W7DK 2025 Field Day Antenna Plan





Cast & Crew

STATION MASTERS:

80/15 Dan KD7SV
40M Al N7OMS
20M Mike W7XTZ
10M Gary WG7X
6M At Large

ROCKET LAUNCHER CREW:

Dan KD7SV
Jeff W8NGS
David W7GEL
Joe KB7ZYB
Leonard KA7NWF
Diane W7SIM
Kerry KI7LTV

SAFETY OFFICER:

Doug AB7DG

LOGGING/NETWORKING:

Randy WB4SPB

PUBLICITY/PROMOTION:

Becky KG7FZH
Sam N9MII

KITCHEN:

Paul Matney WB7PFU
Red WB7EC

ANTENNA ASSEMBLY:

Al N7OMS
Gary WG7X
Julie W7JUL

TENT SETUP:

Doug K7FDR, Lead
Many others “on deck”

TRANSPORTATION:

Mike W7MKE
Mike W7XTZ
Doug K7FDR
Joe KB7ZYB
Joe KB7ZYB
Brad KK7YQC
Paul W7PFU


WESTERN STATE HOSPITAL—LAKEWOOD, WA

W7DK FIELD DAY 2025

THE AB-577 PRACTICE SESSION!



The AB-577 "Rocket Launcher" crew arrives at the W7UUU acreage in Burley, WA



Team Leader Dan KD7SV (left) starts laying out the area with Joe KG7ZYB on the W7UUU "back 40"



David AC7KP rides on the tailgate of Jeff W8NGS's truck getting the gear into position



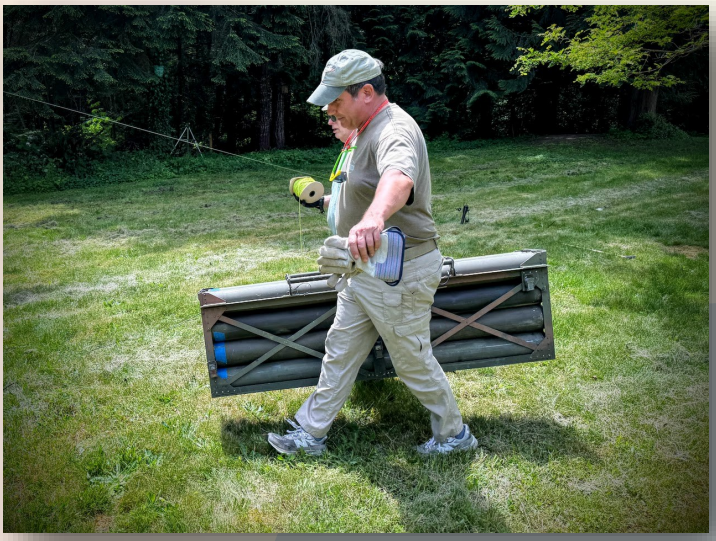
The team brought 2 AB-577 Rocket Launchers but only used one of them today

All photos this page provided by Dave W7UUU

W7DK FIELD DAY 2025

THE AB-577 PRACTICE SESSION!

W7DK



Hauling the tube carrier to the AB-577 tower frame Paul N7OSS with Mike W7MKE on the back side



Brad KK7YQC swings the sledge hammer driving one of the three tower guy points



Dan KD7SV works with Julie W7JUL rigging one of the sets of guy lines for the tower



The team gearing up to start loading tubes into the tower frame

All photos this page provided by
Dave W7UUU

RETURN TO HOME PAGE

email loggersbark@gmail.com

W7DK FIELD DAY 2025

THE AB-577 PRACTICE SESSION!

W7DK



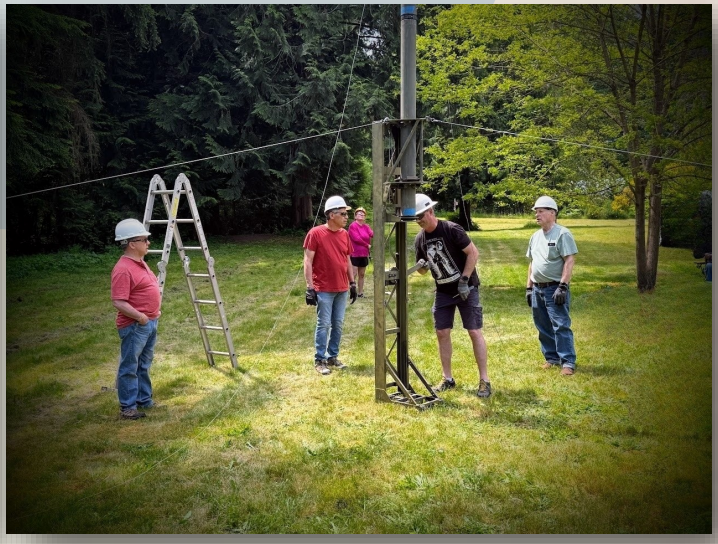
Jeff W8NGS and Dan KD7SV explain to the team how the tubes go together as Mike W7MKE looks on



The tubes begin to be assembled to raise the tower. Jeff W8NGS and Dan KD7SV demonstrate



Jeff W8NGS explains how the upper guy lines attach to the tubes as the tower rises



The team starts raising the tower up

All photos this page provided by
Dave W7UUU

W7DK FIELD DAY 2025

THE AB-577 PRACTICE SESSION!



Safety Officer of the team Doug AB7DG marvels as the AB-577 reaches full 50 foot height



The AB-577 at its full 50 foot glory



Dan KD7SV demonstrates how the tower is manually rotated using a large hand tool that's a part of the AB-577 tool kit



The core team with the completed tower
See cover photo for listing of names and call signs.

All photos this page provided by
Dave W7UUU

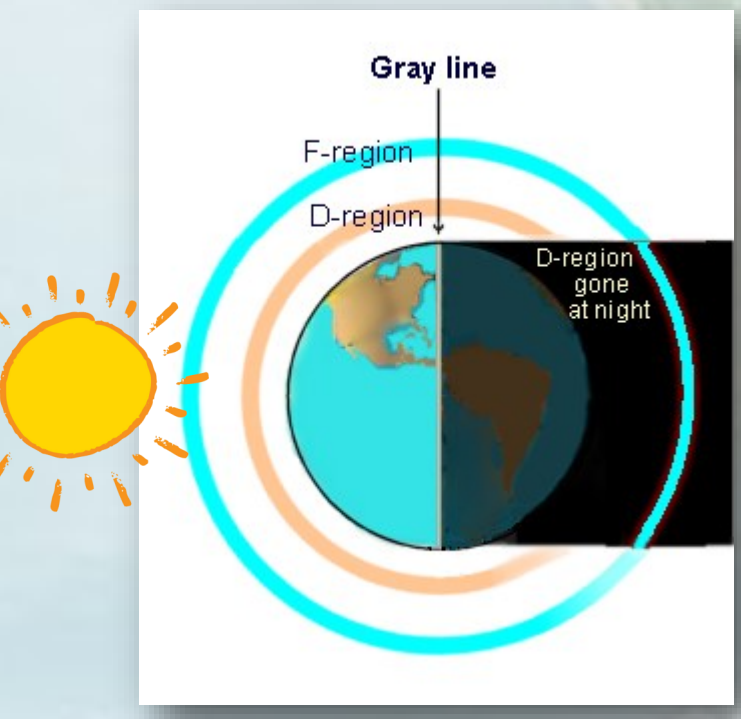
RETURN TO HOME PAGE

email loggersbark@gmail.com

DX-ING WITH THE GREYLINE

BY DAVE W7UUU

IF YOU'RE A HAM WHO WANTS TO CHASE LOW-BAND DX, understanding the greyline can be one of the most powerful tools in your toolkit—one that you may not even know about. This propagation phenomenon, occurring at the fairly-brief transition between day and night, can allow for *amazing* DX reach, especially on the lower HF bands. Most hams have heard of the term "greyline" or maybe "greyline propagation". Some hams summarize it with just their own experiential intuition, and simply say, "if you want to work low-band DX, you need to be on the air at dusk and dawn". But how does greyline work exactly, and how can hams take advantage of it?



In this image the height of the F and D-layers is exaggerated in comparison to Earth's dimensions.
Illustration: Doron Tal 4X4XM

The greyline is the classic "twilight zone"—a narrow band encircling the Earth where day meets night. The greyline (also called the terminator when referenced outside of ham radio contexts) is constantly moving as the Earth rotates, making its position shift throughout the day and across different locations . Within this zone, the ionosphere undergoes dramatic changes that can significantly enhance low-band HF propagation.

At sunrise and sunset, the D-layer of the ionosphere rapidly dissipates, while the higher F-layer remains ionized. This creates a short, but critical, window where signals can travel extraordinary distances with minimal loss. As a result, signals that would typically be absorbed by the D-layer can instead be *reflected* ("skip") efficiently, sometimes allowing for impressive long-haul contacts.

So how does greyline propagation work?

When a signal follows the greyline path, it benefits from reduced D-layer absorption and increased refraction. This allows it to propagate with far less attenuation than during full daylight or full nighttime conditions. Since the greyline is constantly moving, its path varies depending on the time of year and the operator's location. *Not all greyline paths prove useful, however.* This is simply because the path of greyline propagation is often over open sea or barren areas of the earth's surface where there are no hams to work.

DXing with the Greyline

BY DAVE W7UUU

A key feature of greyline propagation is that signals tend to follow the twilight zone *rather than taking a direct, great-circle path.* Stations located along the greyline—regardless of their distance—can often make contact.

Certain paths tend to open up reliably during greyline conditions. For example:

North America to the Indian Ocean region (sunrise in the U.S., sunset in Africa/Asia)

Europe to the Pacific (sunrise in Europe, sunset in the Pacific Islands)

South America to Asia (common near equinox periods)

These paths often allow for incredibly efficient signal transmission, and can result in DX contacts that would be difficult or impossible at other times of the day or during other seasons.

The greyline isn't static—it changes throughout the year. During the equinoxes (March and September), the greyline follows a nearly *north-south path*, maximizing worldwide propagation ("over the poles"). This is often when the most dramatic DX contacts via greyline are possible.

However, as we move toward the solstices (June 20-22 and December 20-23 in the Northern Hemisphere), the greyline path shifts, favoring certain latitudes more than others. During the summer, the greyline propagation tends to benefit the higher latitudes, while in winter, it shifts toward equatorial regions.

This shift is *crucial* for DXers and something you, as a DXer, should stay vigilant of. A path that might be reliable in April may not be as effective in December, and vice versa. Tracking these seasonal variations can help operators plan the best times and frequencies for DX hunting (on the lower bands).



Geochron display of the terminator on the date of the Vernal Equinox on March 21, 2023. The greyline follows nearly a north-south path, when the best DX contacts can be had



Geochron display of the terminator a day after the Winter Solstice on December 22, 2022. During this time greyline propagation favors the equatorial regions
Geochron photos by Dave W7UUU

RETURN TO HOME PAGE

email loggersbark@gmail.com

DX-ING WITH THE GREYLINE

BY DAVE W7UUU

While greyline propagation can seem unpredictable, there are ways to anticipate where conditions might be optimal. But first you need to see where the greyline is at any given time.

The easiest way to track greyline propagation is by using an online greyline map – there are many such online tools and software programs, such as the very powerful site at VOACAP, or another favorite among hams DXMaps, which provides real-time greyline tracking of which stations are working each other.

These maps show the twilight zone's exact position at any given moment. Another fun one to learn the basics is called Day/Night Terminator Map at this link where you can simply move the sliders and change the date and time to see the movement of the greyline. It's a very simple learning tool.



Geochron display of the greyline on the Summer Solstice—note that it's exactly opposite from the Winter solstice
Photo by Dave W7UUU

The bottom line of learning to use greyline propagation is really to understand the local sunrise and sunset times—knowing when the greyline will pass over your QTH and your target DX locations can significantly improve your chances of making successful contacts using this method.

So what are the best bands for Greyline propagation?

Not all amateur radio bands respond equally to greyline effects. The most significant enhancements tend to occur on the low-frequency bands:

160 Meters (1.8 MHz) – The "Top Band" often sees dramatic improvements during greyline conditions.

80 Meters (3.5 MHz) – Similar to 160 meters, but with slightly better reliability.

40 Meters (7 MHz) – One of the most dependable DX bands for greyline, often providing solid openings between continents.

30 Meters (10 MHz) – A quieter band with less noise, making it a favorite for CW and digital operators looking to work greyline DX.

Higher frequencies, such as 20 meters and above, can also experience *some* greyline enhancements, but the effect is usually not as dramatic as on the lower bands.

DX-ING WITH THE GREYLINE

BY DAVE W7UUU

One of the important concepts of greyline to grasp is that no matter where you are on earth (Northern hemisphere or Southern), greyline propagation will tend to fizzle out in your "local winter" and be *less predictable* in your "local summer". If you're within ± 4 to 6 weeks of local Winter Solstice you will very likely experience severely diminished greyline conditions.

The main culprit for this is lower ionospheric electron density due to weak solar illumination (it's winter after all—earth tilting away from the sun and all that) - resulting in shorter twilight periods. There's also a shorter window of opportunity for greyline DX, since *both* stations need to be in sunrise or sunset conditions at the same time

Likewise, whoever is in their local Summer Solstice will have *longer* twilight paths and better ionization (especially in the F-layer). But somewhat *less predictable* greyline effects due to skewed angles and less sharp sunrise/sunset transitions.

So sum it all up regarding when greyline is best:

1. **Your local *winter* solstice timeframe** is not a great time to expect greyline propagation.
2. **Your local *summer* solstice timeframe** is better than winter, but greyline results can be very unpredictable.
3. **The 4 to 6 weeks before and after** the spring (vernal) or fall (autumnal) equinoxes are the best times of the year to expect greyline propagation successes.

But that's not all! Latitude plays a big role in greyline effectiveness too. The Earth's axial tilt and its angle relative to the Sun and the terminator line play a major role.

The latitudinal 'Goldilocks Zone' typically lies between ±35 and ±55 degrees latitude. Using the Western United States as our yard stick, that means that the ideal "sweet spot" for greyline propagation would range from roughly Bakersfield, California in the south up to Salem, Oregon in the north.

Sure—you can certainly expect some positive effects of greyline propagation beyond that range, but they tend to taper off quickly. By the time you reach either the poles or the equator, greyline effects may be far less pronounced and more fleeting, due to sunset transitions happening too slowly (in high latitudes) or too quickly (in equatorial areas).

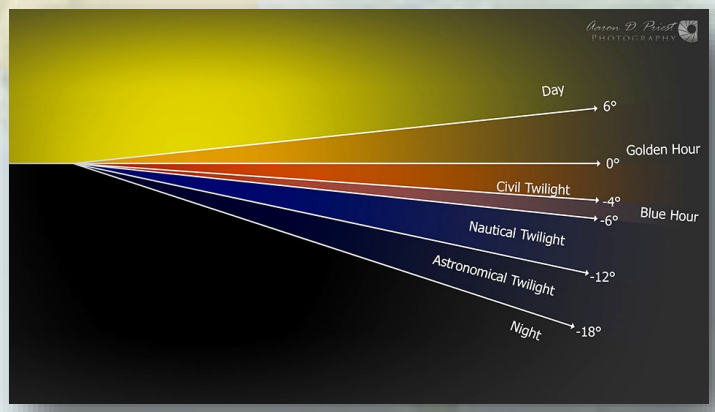
So with all this in mind, here are some tips to maximize your chances of making greyline DX contacts:

Be on the air at the right time – Check your local sunrise and sunset times and plan your operating schedule accordingly. Use some sort of greyline map so you can see not only your own sunrise and sunset, but to see where your desired DX might be.

I learned early on in my own experiments with using greyline propagation that if both sides of the QSO are in the greyline at the same time (±30 minutes) you will get the most benefit. This is largely due to the D-layer absorption being minimalized on both ends of the "conduit", allowing E and F-layer propagation to do its job.

DX-ING WITH THE GREYLINE

BY DAVE W7UUU



Twilight and dawn are two sides of the same coin… the greyline for radio encompasses the whole range of the zone between day and night, also called the terminator.
Image: Aaron D. Priest Photography

But even if the "far end" is no longer in greyline but you are, you may very well experience beneficial propagation—I've personally had this happen many times especially on 40 meters.

If possible, try to aim your antenna along the greyline. If you're using a directional antenna, point it along the expected greyline path between you and the other station. Of course, this won't help most users—since greyline propagation favors the lower bands, and relatively few hams have directional antennas below 14 MHz. But if you've got a 20-meter beam, for example, you can still take advantage of the greyline path—as long as both ends of the "QSO pipe" are in the twilight zone and the band isn't being clobbered by D-layer absorption that tends to hit the higher bands harder. Bear in mind: greyline propagation affects the entire path—not just the beamwidth. So any antenna on 160, 80, 40, 60, or 30 meter bands will still direct energy "into the pipe" - just not as much as you would get from a Yagi or other highly directional antenna. My advice: just try it and see what you get. You may well be pleasantly surprised.

If possible, use CW or digital modes such as FT8 or RTTY.
Lower-band DX is often more successful using modes that can handle weak signals, such as CW, FT8, or RTTY. Sure SSB can work as well but it's not the most efficient mode for marginal conditions.

Watch for quick changes. Since the greyline moves *fast,* propagation can shift within minutes. Using my QTH as an example, at roughly 47.44 degrees, the terminator moves at just over 700 MPH (1126 KPH)! Be ready to call CQ and respond quickly to DX stations to maximize what may be a brief opening.

I didn't really think about greyline propagation until a few years ago, when I decided to start working on DX confirmations "by the band" towards my 5-band DXCC. I had 20, 15, and 10 meters down pat but in order to achieve the 5BDXCC award, I had to master 40 and 80. Until I really started taking greyline propagation seriously, my progress was very slow.

The biggest breakthrough in the concept for me was working FW5JJ in Wallis & Futuna Islands in September 2015 on 80m CW at 6:40 AM running just 100 watts to a very low (25 feet to apex) G5RV antenna while operating portable. I broke the pileup to the DXpedition simply due to much of the path being in greyline on both ends. I was astounded at how strong the signals were, and the ease with which I broke through the mass of calling stations.

DXING WITH THE GREYLINE

BY DAVE W7UUU

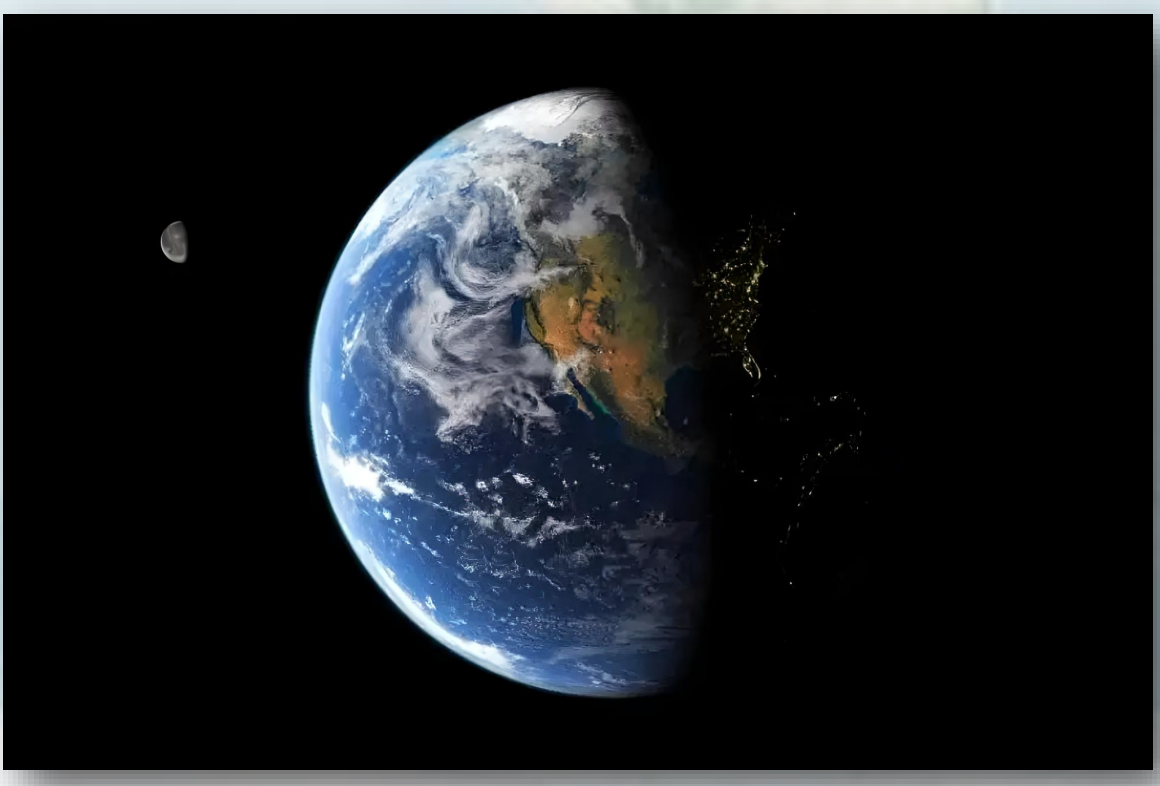
While I'm still working on my 80m DXCC goal, by taking advantage of greyline techniques, I fairly quickly accomplished DXCC on 40 meters.

I hope this article helps others to understand what it took me a long time to wrap my head around. It's rewarding making contacts using other than conventional propagation, and knowing the reason it worked so well (as in my FW5JJ contact)!

If you're trying to chase DX on the lower bands, the greyline isn't just some theoretical construct—it's quite real and is repeatable. If you've never experimented with using greyline propagation, I strongly suggest you give it a try especially as we come into the end of summer when the autumnal equinox approaches. If you've never been on the low bands early in the morning (or right after sunset), you might be surprised at the DX that can be had during that short window of opportunity.

Next month, I will have a short article showcasing some of the various "greyline clocks" and displays that are available, from simple online websites, to dedicated programs, all the way to top-end systems like the Geochron.

-Dave W7UUU



This is a view from space showing the greyline (or terminator) positioned over the great lakes region of the United States.

Photo: NASA

GENERAL MEETING



Eagles Aerie #2933 South Tacoma May 10, 2025



Mike W7MKE with his always-present chipper attitude and welcoming smile waits for the meeting to start



While waiting in the parking lot, I was parked next to club President Adam W2NCC for a "window to window" eyeball QSO



Clockwise L>R: Mike W7XTZ, Phil KC7PS, Jiro KW6A, and Jiro's wife, K4KOI—await the start of the meeting



View of the room just before the Doug Oakman AD7AV presentation is set to begin

All photos this page provided by Dave W7UUU





Cute-as-bugs couple Jule W7JUL and her hubby Brad KK7YQC. Julie is this month's "Member Spotlight"



David AC7KP hanging out with Paul W7PFU before the meeting starts



The Reverend Doctor Doug Oakman AD7AV, for whom the club's Oakman Library is named, was the May 2025 Program Presenter at the General Meeting. His presentation was all about Pierce County ARES and how to get involved.



Jiro KW6A gave a short presentation on an alternate training and licensing class program offered by the Mike & Key Club of Auburn, Washington

All photos this page provided by Dave W7UUU

RETURN TO HOME PAGE

email loggersbark@gmail.com

STRAY TOPICS OF INTEREST:

1954: The Year Hams Got Transistors

TRANSISTORS WERE NOT COMMON IN THE HAM RADIO WORLD until the mid-1950s when they became affordable enough for hobby use.

In the early 1950s, when the transistor was still a brand-new invention, most were used solely by engineers or the military. That changed in 1954 with the introduction of the CK722, a small blue metal-can transistor that became the first widely available and affordable transistor for hobbyists.

The CK722 was manufactured by Raytheon, based on the company's more expensive industrial-grade CK718 and CK721 transistors. These earlier models were germanium PNP units primarily used in hearing aids and early signal amplifiers. Raytheon's engineers noticed that some transistors that didn't quite meet strict specifications were still totally functional—just not up to the strict spec for critical applications. Instead of trashing them, Raytheon repackaged these rejects as the CK722, marketed specifically to experimenters and hobbyists. This was a revolutionary idea at the time.



Very early(1954) Raytheon CK711 transistor—Photo: Wikipedia

Priced at $7.60 ($90 today!) when it first hit the market, the CK722 was far less expensive than its professional counterparts. Within a year, the price dropped to about $3.50 ($41 today), and eventually fell below $1.00 ($11 today) by 1957—putting it well within reach of teenagers, tinkerers, and hams.

Ham radio operators were quick to recognize the potential. The CK722 could be used in low-power audio amplifiers, simple regenerative receivers, Morse code oscillators (see the next page), and even low-power transmitters in QRP experiments.

Dozens of articles in publications like Popular Electronics and QST featured circuits using the CK722, from simple code practice oscillators to transistorized VFO buffers.

Raytheon cleverly encouraged this audience by sponsoring circuit design contests and publishing a free booklet titled "Transistor Applications," packed with projects designed specifically around the CK722. The transistor's distinct appearance—painted blue with its part number stamped in white—helped solidify its identity in the hobby world.

By the late 1950s, the CK722 had earned a sort of cult status. Though quickly eclipsed by newer, more powerful silicon and germanium transistors, it remains fondly remembered by hams and experimenters who got their start soldering together CK722 projects on wooden boards or metal chassis.

For many hams, the CK722 was likely the very first transistor they ever worked with. It certainly was in my case, but of course by the time I was getting into hob-

STRAY TOPICS OF INTEREST:

1954: The Year Hams Got Transistors

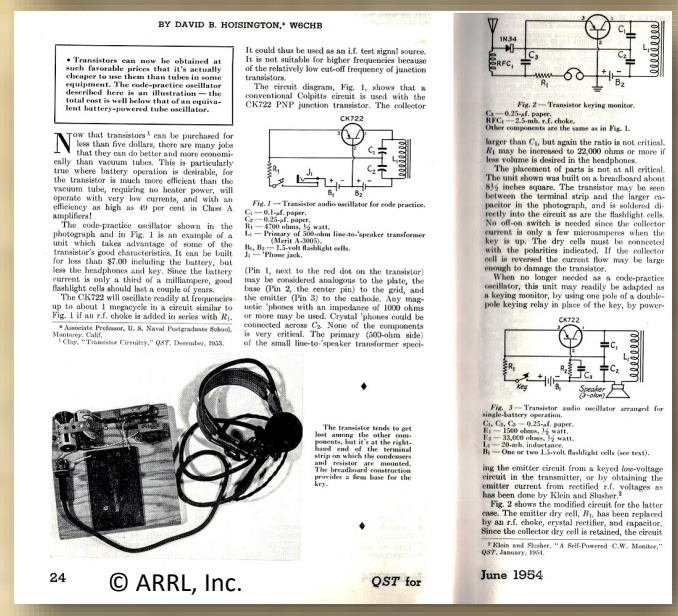
by electronics (1972 or so), the CK-722 could be found in blister packs at Radio Shack for "3 for $1.59" ($12 today). By that time there were many transistors that could be had for very low prices, including the ubiquitous 2N107 that came in 5 packs for about the same price, and even the first popular "power transistor", the 2N3055 that was not much more for the single unit, but gave you a huge output of many watts at audio frequencies.

But it was the early CK-722 that started hams and hobbyists down the path of building projects with transistors. And most of the old circuits you can find in these early publications can easily be replicated by using any number of crazy-cheap transistors you can buy on eBay and Amazon as evidenced below. This one box of assorted PNP and NPN "small signal" transistors for $8.99 on Amazon could build dozens and dozens of the simple projects you can find in the old books and magazines—so you can still very much relive the fun of those days of the earliest transistors.

-Dave W7UUU







BY DAVID B. HOISINGTON,* W6CHB

• Transistors can now be obtained at such favorable prices that it's actually cheaper to use them than tubes in some equipment. The code-practice oscillator described here is an illustration — the total cost is well below that of an equivalent battery-powered tube oscillator.

Now that transistors[1] can be purchased for less than five dollars, there are many jobs that they can do better and more economically than vacuum tubes. This is particularly true where battery operation is desirable, for the transistor is much more efficient than the vacuum tube, requiring no heater power, will operate with very low currents, and with an efficiency as high as 49 per cent in Class A amplifiers!

The code-practice oscillator shown in the photograph and in Fig. 1 is an example of a unit which takes advantage of some of the transistor's good characteristics. It can be built for less than $7.00 including the battery, but less the headphones and key. Since the battery current is only a third of a milliampere, good flashlight cells should last a couple of years.

The CK722 will oscillate readily at frequencies up to about 1 megacycle in a circuit similar to Fig. 1 if an r.f. choke is added in series with R_1.

* Associate Professor, U. S. Naval Postgraduate School, Monterey, Calif.

[1] Clay, "Transistor Circuitry," QST, December, 1953.

It could thus be used as an i.f. test signal source. It is not suitable for higher frequencies because of the relatively low cut-off frequency of junction transistors.

The circuit diagram, Fig. 1, shows that a conventional Colpitts circuit is used with the CK722 PNP junction transistor. The collector (Pin 1, next to the red dot on the transistor) may be considered analogous to the plate, the base (Pin 2, the center pin) to the grid, and the emitter (Pin 3) to the cathode. Any magnetic 'phones with an impedance of 1000 ohms or more may be used. Crystal 'phones could be connected across C_5. None of the components is very critical. The primary (500-ohm side) of the small line-to-speaker transformer speci-

Fig. 1 — Transistor audio oscillator for code practice.
C_1 — 0.1-μf. paper.
C_2 — 0.25-μf. paper.
R_1 — 4700 ohms, ½ watt.
L_1 — Primary of 500-ohm line-to-speaker transformer (Merit A-3005).
B_1, B_2 — 1.5-volt flashlight cells.
J_1 — Phone jack.

The transistor tends to get lost among the other components, but it's at the right-hand end of the terminal strip on which the condensers and resistor are mounted. The breadboard construction provides a firm base for the key.

Fig. 2 — Transistor keying monitor.
C_3 — 0.25-μf. paper.
RFC — 2.5-mh. r.f. choke.
Other components are the same as in Fig. 1.

larger than C_6, but again the ratio is not critical. R_1 may be increased to 22,000 ohms or more if less volume is desired in the headphones.

The placement of parts is not at all critical. The unit shown was built on a breadboard about 8½ inches square. The transistor may be seen between the terminal strip and the larger capacitor in the photograph, and is soldered directly into the circuit as are the flashlight cells. No off-on switch is needed since the collector current is only a few microamperes when the key is up. The dry cells must be connected with the polarities indicated. If the collector cell is reversed the current flow may be large enough to damage the transistor.

When no longer needed as a code-practice oscillator, the unit may readily be adapted as a keying monitor, by using one pole of a double-pole keying relay in place of the key, by power-

Fig. 3 — Transistor audio oscillator arranged for single-battery operation.
C_1, C_2, C_3 — 0.25-μf. paper.
R_1 — 1500 ohms, ½ watt.
T_1 — 25,000 ohms, ½ watt.
L_1 — 20-mh. inductance.
B_1 — One or two 1.5-volt flashlight cells (see text).

ing the emitter circuit from a keyed low-voltage circuit in the transmitter, or by obtaining the emitter current from rectified r.f. voltages as has been done by Klein and Shaheen.[2]

Fig. 2 shows the modified circuit for the latter case. The emitter dry cell, B_1, has been replaced by an r.f. choke, crystal rectifier, and capacitor. Since the collector dry cell is retained, the circuit

[2] Klein and Shaheen, "A Self-Powered C.W. Monitor," QST, January, 1954.

24 © ARRL, Inc. QST for June 1954

June 1954 CK-722 CPO project in QST Magazine

RETURN TO HOME PAGE

email loggersbark@gmail.com

RCT Bulletin Board

Posted notes and other important stuff

Here's a **useful tip** when reading the Bark: if you want to view a link, "right click" > "Open link in new window"… that way you won't lose your place in the Bark!

IMPORTANT NOTE: The Logger's Bark does not use ChatGPT or other AI creation sites to *write articles*. Sometimes graphics are AI generated out of need for license-free images, but NEVER is the text… we *don't allow any* AI written article submissions ■ *-editor*

Last month's Hidden Object:



Fahnestock Clip—found on Page 63, lower right, under the lady's radio console

Last Month's Hidden Word:

Fahnestock

It was hidden on Page 20 in the (oddly formatted) yellow sidebar





RETURN TO HOME PAGE



WA7BNM CONTEST CALENDAR

Contest events for the coming month

HUGE THANKS TO Mr. Bruce Horn, WA7BNM for publishing his "Contest Calendar" for all these many years… a truly wonderful resource for finding virtually every ham radio contest on Earth that might be happening, in most any mode and most any region in the world. Follow the link to take you to the site, then sort through the various options to find the specifics of every upcoming event. For now, here's the **WA7BNM** Contest Calendar for the this month. Click the calendar below to visit Bruce's site directly.



June 2025	
ARS Spartan Sprint	0000Z-0200Z, Jun 3
HA3NS Sprint Memorial Contest	1900Z-1959Z, Jun 6
10-10 Int. Open Season PSK Contest	0000Z, Jun 7 to 2359Z, Jun 8
VK Shires Contest	0000Z-2359Z, Jun 7
Tisza Cup CW Contest	0200Z-1459Z, Jun 7
Wake-Up! QRP Sprint	0600Z-0800Z, Jun 7
Kentucky QSO Party	1300Z, Jun 7 to 0100Z, Jun 8
IARU Region 1 Field Day, CW	1500Z, Jun 7 to 1459Z, Jun 8
ARRL Inter. Digital Contest	1800Z, Jun 7 to 2359Z, Jun 8
4 States QRP Group Second Sunday Sprint	0000Z-0200Z, Jun 9
YB ORARI DX Contest	0000Z-2359Z, Jun 14
Asia-Pacific Sprint, SSB	1100Z-1300Z, Jun 14
Portugal Day Contest	1200Z, Jun 14 to 1200Z, Jun 15
SKCC Weekend Sprintathon	1200Z, Jun 14 to 2359Z, Jun 15
AGCW VHF/UHF Contest	1400Z-1800Z, Jun 14
REF DDFM 6m Contest	1400Z, Jun 14 to 1400Z, Jun 15
GACW WWSA CW DX Contest	1500Z, Jun 14 to 1500Z, Jun 15
ARRL June VHF Contest	1800Z, Jun 14 to 0259Z, Jun 16
Run for the Bacon QRP Contest	2300Z, Jun 15 to 0100Z, Jun 16
NTC QSO Party	1900Z-2000Z, Jun 19
SMIRK Contest	0000Z, Jun 21 to 2359Z, Jun 22
All Asian DX Contest, CW	0000Z, Jun 21 to 2359Z, Jun 22
IARU Region 1 50 MHz Contest	1400Z, Jun 21 to 1400Z, Jun 22
LZ International 6-Meter Contest	1400Z, Jun 21 to 1400Z, Jun 22
Stew Perry Topband Challenge	1500Z, Jun 21 to 1500Z, Jun 22
West Virginia QSO Party	1600Z, Jun 21 to 0400Z, Jun 22
ARRL Kids Day	1800Z-2359Z, Jun 21
SKCC Sprint	0000Z-0200Z, Jun 25
His Maj. King of Spain Contest, SSB	1200Z, Jun 28 to 1200Z, Jun 29
ARRL Field Day	1800Z, Jun 28 to 2100Z, Jun 29



Click Calendar to visit online

***WA7BNM** Contest Calendar data used with permission*

Background Image Source LINK

RETURN TO HOME PAGE

email loggersbark@gmail.com

THE W7DK ELMER BOARD



Do you have a skill or tool to help new hams?

YOU! YES *YOU!* Do YOU have a skill you could pass on to new amateur radio operators? Do you possess a skill or piece of gear that you're willing to share with others to fix antenna problems, diagnose noise issues, drive a ground rod, teach Morse, help teach technical topics? If the answer is YES you too could be a W7DK Elmer!! Let any officer know what your skills are or how you could help new hams get a leg up on the hobby. And if you're one of those already on the list, are there any changes we should be aware of? If so please hit the email address (found bottom of page on the right) and let us know so we can update the W7DK Radio Club of Tacoma "Elmer Board".

NEW HAMS OR MEMBERS: If you are looking for help, and NEED AN ELMER to help guide your way, use this table! Find the skill you need on the left, then look for an Elmer Provider of that skill on the right and reach out to them. ALL of these Elmer's have committed to helping so please don't hesitate.

ELMER ("MENTOR") BOARD

Do you need help with some area of ham radio?

List of members' areas of interest:

1. Technical questions, Classes
2. Help with Morse Code
3. License Examinations
4. Antenna and Station Planning
5. Antenna and Tower Erection
6. Buying Equipment (new or used)
7. Equipment Repair
8. Understanding and Using Your Gear
9. DXing and Contests
10. Club and ARRL Activities
11. Using Test Equipment
12. IRLP, Digital, SDR, APRS, WinLink, etc.
13. Basics of Electronics—how things work

Current as of January 2025

Name/Call Sign/Phone Number/Topic:

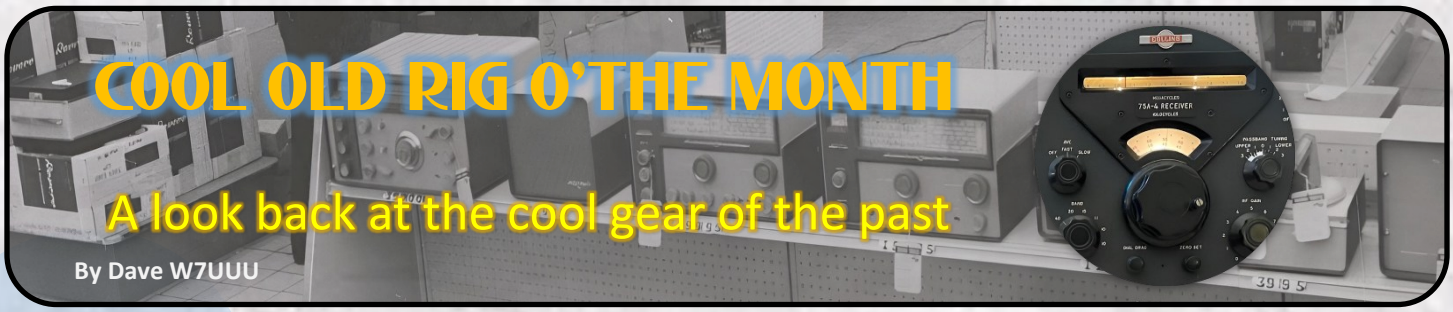
Adam W2NCC 360-870-7894 (4, 5, 6, 7, 11)
Dave N7HT 253-363-1692 (1, 2, 4, 6, 8)
Dave W7UUU (253-820-0890 (2, 4, 6, 9)
Al N7OMS 253-495-9068 (10, 12)
Mike W7XTZ 253-405-8095 (6, 8, 10)
Stephen AD7AB 253-212-9437 (1, 3, 4, 12)
Randy WB4SPB 253-761-9391 (2)
Phil K7PIA 253-307-4781 (9, 10, 12)

Are you an RCT member with skills to offer?

Please let any officer know and we can add you!

Variable Capacitor 2025

Note: *Providers or users of the Elmer Board must be local to the Radio Club of Tacoma. This is a local club service for our local members only. Thank you!*



COOL OLD RIG O'THE MONTH

A look back at the cool gear of the past

By Dave W7UUU

ONE OF THE LONGEST RUNNING TRANSCEIVER FAMILIES from the late 1970s all the way into the 2000s was the Ten-Tec Omni lineup. The company model numbering scheme always seems a little odd to me—the sequencing isn't very intuitive. In the specific case of the Omni series, the initial offering was the Omni-A, which covered the traditional HF bands from 160 through 10 meters (no WARC bands). Tuning was via an analog tuning dial. Next came the Omni-B (also known as the Omni A series B or Omni D series B, depending on display type—those odd variances in model numbers at play!). The Omni-B partially offered WARC bands. It could receive on 30 meters but not transmit. The AUX band position could be outfitted to transmit and receive on 12 meters. But 17 meters was not an option at all.

After the Omni-B, Ten-Tec skipped C, instead jumping to the Omni-D which added a digital display, but once again only covered the traditional 160-10 meter bands (except if it was the Omni-D Series-C which offered the WARC bands as an option). Oddly the Omni-D was equipped with a front panel "Squelch" control despite only being a SSB and CW rig… modes that rarely if ever used with squelch (such as an FM transceiver would). This was replaced in later models with a Notch filter (a vastly more useful feature!). The final iteration of the series of Omni transceivers using a letter in the model, and the best of the series, is the Omni-C(546) (not to be confused with the Omni -D(546)). Except it's not labeled that way on the front panel—it's just called "Ten-Tec Omni"! I have no clear idea why the Omni-D came out before the Omni-C or why all the previous models had the letter on the front panel but not the C. As I said, the Ten-Tec model number scheme can be a bit confusing and nonsensical although I'm sure there were good reasons for it from the company's perspective.

My own personal guess, and not an opinion I've ever heard or read, is that all they ever wanted from the Omni-A, B, C, and D series was a "perfect radio we will just call the Omni". But in order to fund the research and development of the "Ultimate Omni" they had to sell lesser developmental variations. They knew of the coming new WARC bands (approved by WARC in 1979) but couldn't yet implement them. So by selling the A, B, and D in their variations, they finally had all the pieces to the puzzle to build the "Perfect Ten-Tec Omni" - and since a "C" version had not been publicly released, they launched the new rig simply as the Omni (sans a letter on the front panel) but list it in the chronology as the Omni-C.



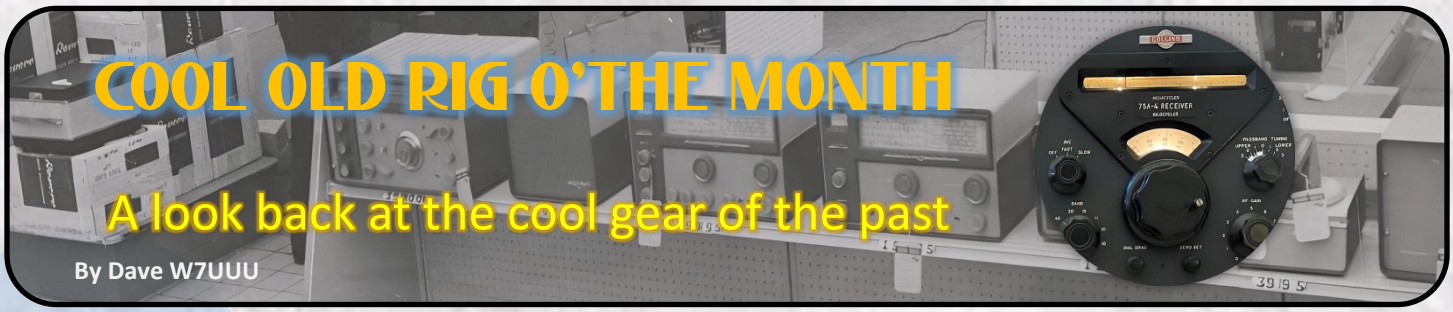
Ten-Tec Omni-C

Photo by Dave W7UUU

The Ten-Tec Omni-C, or just "Omni", was introduced in 1980 and if you take time to read all the many reviews, it's very clear that Ten-Tec fans consider the C

RETURN TO HOME PAGE

email loggersbark@gmail.com



COOL OLD RIG O'THE MONTH

A look back at the cool gear of the past

By Dave W7UUU

by far the best iteration. It would remain so until 1992, when the astounding Omni-VI (now switching to numbers), with no prior "numbered Omni models" was introduced.

So let's delve into the basic functions of the Omni-C and what makes it so much better than its predecessors.

The Omni-C as mentioned covers all of the HF bands from 160 through 10 meters, including the WARC bands (30, 17, and 12). And unlike the prior versions, they now offered a nice selection of filters for use in crowded band conditions—a three-position IF crystal filter, as well as a 3-position AF filter, and a variable Notch Filter (which the A and D models lacked) for "notching out" nearby interfering stations or heterodynes.



Model 255 PS
Photo by Dave W7UUU

Ten-Tec has always been *legendary* for their "QSK" function, or ability to nearly-instantaneously switch from transmit to receive while operating CW, even at very high speeds. You can actually hear the background noise between the dits and dahs (dots and dashes). This is a very handy feature when operating contests, where a responding station could be heard even after you start sending CQ again.

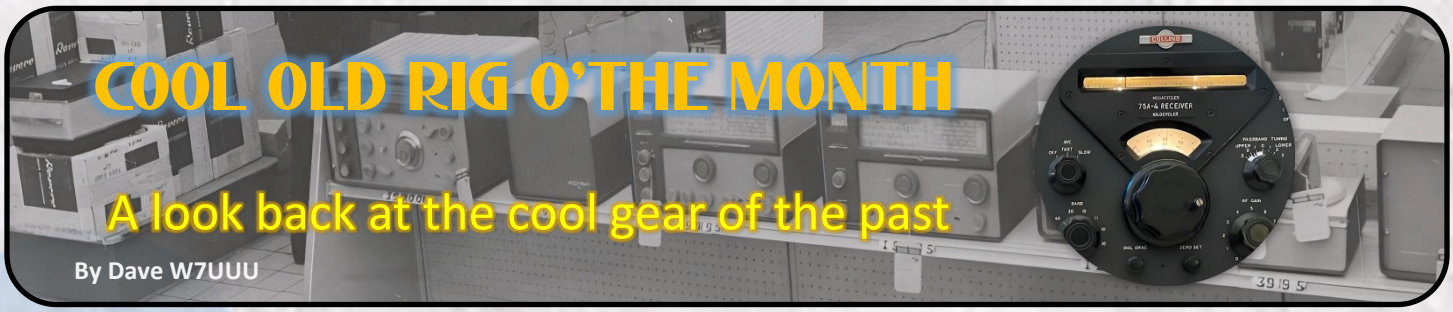


Model 215 Mic
Photo by Dave W7UUU

Another cool Ten-Tec feature for CW operators is the "Zero Beat" button on the front panel. This temporarily disables the CW transmitter offset to allow the operator to precisely zero-beat the other station—resulting in very accurate alignment of station signals (which in turn allows each side of the QSO to use very tight filters if desired, since they are very closely aligned in frequency).

Modes of course are as expected in any such HF transceiver: CW, USB, and LSB. There's no provision for AM (on any of the Omni-A>D series, not until the much-later Omni-VII).

Another feature unique to Ten-Tec is how they address the RIT offset. (Receiver Incremental Tuning). Most modern rigs have an RIT (sometimes called a "Clarifier"). But on the Omni-C, there are two ranges, labeled Min and Max. In the Min, or minimum, range, you can vary the receive frequency by +/- 500 Hz which is a typical range for "clarifying" SSB signals that might be a bit off of your sending frequency.
But in the Max, or maximum, range, the variance is +/- 4 KHz which in many cases is plenty of variance to operate "Split Mode" when working DX who is "listening Up". This is especially true for CW, as the "Up" range most often called out is typically "up 2 to 5". This means that for many DX CW split situations, you don't need the Model 243 external VFO.



COOL OLD RIG O'THE MONTH

A look back at the cool gear of the past

By Dave W7UUU

Lastly, typical of all of the Omni-series rigs, the 100-watt transmitter is broad banded. There's no tuning required of the driver or final amplifier. However, there is no automatic SWR protection like you would find in the similar Drake TR-7 of the same era. With any transceivers of the Omni-A>D series it's always best to either have a good resonant antenna match or use a suitable external tuner.

The Omni-C wasn't cheap—$1,289 was the introduction price (just shy of $4,000 today) without any accessories—not even the microphone. But it caught on very quickly as a top-end stellar performer. The receiver was very highly reviewed, and still holds up to this day—even out-performing some modern rigs. And of course, for CW operators, the QSK (break-in keying) is unparalleled.

And not to mention, it's just darn fine looking and a ton of fun to use on the air!

The Omni-C featured in this article is my own—I was very lucky to find it at a hamfest a while back, complete with the matching power supply (still in the original box), microphone and all manuals including the service manual. The best part of the deal it was priced at only $100 for the entire setup!

I've only used it on the test bench so far, establishing operation on all bands and such. But soon, the Omni will take its place in my shack at a new operating position on the patch bay dedicated to "early 1980s rigs.

-Dave W7UUU





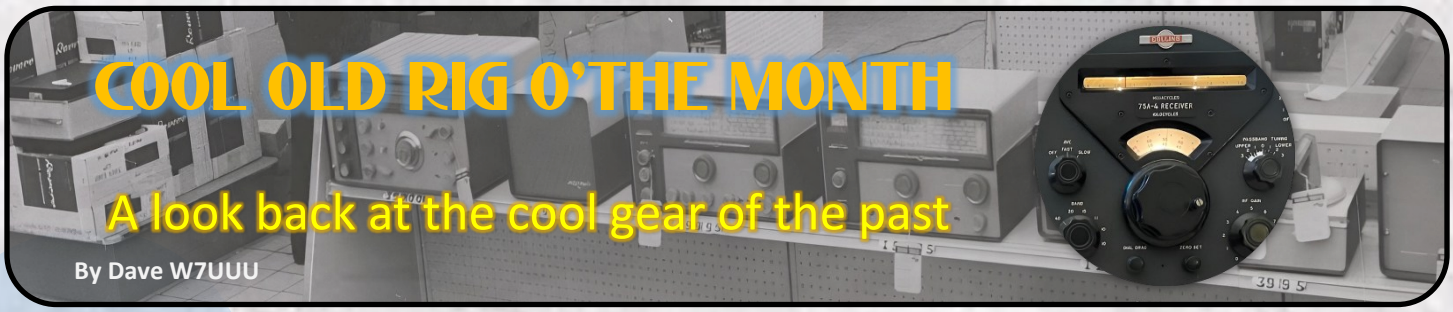
The predecessor: The Ten-Tec Omni-D transceiver

RETURN TO HOME PAGE

COOL OLD RIG O'THE MONTH

A look back at the cool gear of the past

By Dave W7UUU



OMNI-C has what it takes to filter the crowds. To narrow the Amateur Radio world right down to the particular signal you want. The selectivity, sensitivity, dynamic range and operational features you need to cut any crowd down to size.
Tailored i-f response. OMNI is equipped with the potential for ***seven*** response curves to handle any listening situation.

Standard filters include an excellent 8-pole 2.4 kHz crystal ladder filter and, in addition, a 150 Hz active audio cw filter with three ranges (450, 300, 150 Hz).

Optional filters include 1.8 kHz 8-pole crystal ladder ssb filter, 500 Hz 8-pole cw filter, and 250 Hz 6-pole cw filter.

Front panel switches put any optional filter in series with the standard filter for up to ***16 poles of filtering*** for near ultimate skirt selectivity.

Four i-f response curves for ssb and three for cw. That's response tailoring, that's crowd control.

Optimized sensitivity and dynamic range. The OMNI sensitivity range of 0.3 μV typical (slightly less on 160 & 80M) combines with a 90 dB dynamic range to provide an ideal balance that will handle any situation from copying a weak signal half way 'round the world to keeping the next-door kilowatt from muscling in. And a PIN diode switched 18 dB attenuator is included for extra insurance against overload.

More crowd-handling features—and all standard equipment.

Built-in notch filter. To drop out unwanted signals or carriers. Tunable from 200 Hz to 3.5 kHz, with a 50 dB notch depth.

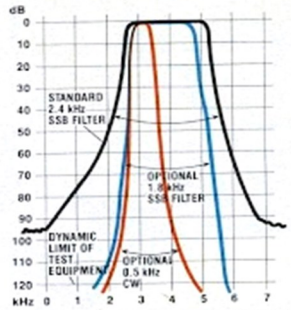
3-mode, 2-range offset tuning. To put you where the others aren't and where the elusive DX is. Move just the OMNI receiver, or just the transmitter section, or the entire transceiver, ±500 Hz or ±4 kHz. For complete freedom of frequency movement to get away from the crowds.

Built-in noise blanker for those times when your noise-generating neighbor is crowding your receiver. Filtered to handle the big signals easily.

2-speed break-in. When QRM or QRN is heavy, switch to "Slow." Use "Fast" for instant, full break-in for enjoyable rag-chews or stalking DX.

OMNI-C features stand out in any crowd.

All solid-state—from the pioneer, Ten-Tec.



OMNI/SERIES C I-F RESPONSES WITH STANDARD AND OPTIONAL FILTERS.

The Rig That Filters The Crowd



TEN-TEC OMNI-C

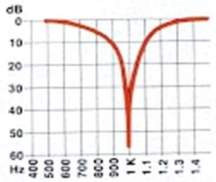
"Hang" AGC for smoother action.
WWV reception on the 10 MHz band.
Digital readout in two colors, red for the 5 significant places, green for the 6th digit (100 Hz). Instant recognition.
Separate receiving antenna capability. Switch receiver to a common antenna for transceive or separate receive-only antenna; the system also acts as receiving antenna by-pass with an instant break-in linear amplifier or transverter.
"S"/SWR meter, electronically switched.
200 watts input, all bands, with 50-ohm load. 5 year pro-rata warranty.
100% duty cycle on all bands up to 20 minutes. Full RTTY and SSTV power.
Built-in VOX and PTT with front panel controls.
Built-in phone patch jacks for easy interface.
Built-in zero-beat switch for spotting the exact frequency of a DX station.
Built-in adjustable sidetone volume and pitch.
Adjustable threshold ALC, optimum power for driving a linear. Provides means of working into a high SWR.
Front panel control of linear or antenna. The rear panel bandswitch terminals control relays or circuits in step with front panel bandswitch.
Automatic sideband selection plus reverse.
Low distortion audio, less than 2%; a Ten-Tec trademark.
Clean signal, exceeding FCC requirements.
High stability over wide temperature and voltage excursions.
Built-in speaker, compression-loaded; in bottom of cabinet.
Plug-in circuit boards for fast easy service.
12-14V dc power for easy mobile use.

Full complement of accessories: Model 280 Dual Primary AC Power Supply, $169; Model 255 Deluxe Power Supply/Speaker Combo, $199; Model 243 Remote VFO, $189; Model 215 PC Microphone, $29.50; Model 214/234 Microphone/Speech processor, $39/$139; Model 645 Dual Paddle Keyer, $85; Model 670 Single Paddle Keyer, $39; Model 227 Antenna Tuner, $79; Filters $55 ea.

Made in the U.S.A.

Model 546 OMNI-C transceiver $1289

Get out of the crowds with OMNI-C. See your TEN-TEC dealer or write for details.



NOTCH FILTER PERFORMANCE ADJUSTED TO 1 kHz POINT.

All 9 hf bands—only crystals are needed for 18 and 24.5 MHz bands.
Broadband design for instant band change without tune-up or danger of damage to the final amplifier. Another Ten-Tec *original*.

TEN-TEC, INC.
SEVIERVILLE, TENNESSEE 37862

RETURN TO HOME PAGE

email loggersbark@gmail.com

STRAY TOPICS OF INTEREST:

The Fahnestock Clip

By W7UUU

LAST MONTH'S HIDDEN OBJECT AS WELL AS THE HIDDEN WORD was the Fahnestock Clip. But I bet a lot of younger readers might have been wondering just what a "Fahnestock Clip" even is and what it's for? (there's a picture of one right below).

In the early days of practical electricity, when inventors and tinkerers were experimenting with coils, condensers, and crude batteries, one small invention stood out—not for its complexity, but for its simplicity and reliability. That invention was the Fahnestock clip.



Patented in 1907 by John Schade of New York and assigned to the Fahnestock Electric Company (under the Fahnestock Transmitter Co. division), the Fahnestock clip was a deceptively simple spring terminal that allowed for quick, temporary electrical connections. The design consists of a curved phosphor bronze or spring steel strip, bent into a shape that allows a bare wire to be inserted under tension. A press of the finger opens the clip; releasing it traps the wire snugly in place. No tools needed, no screws to strip—just snap, connect, and go. Zip zap!

In the early 20th century, the clip rapidly found its place in the booming world of radio. At a time when crystal sets, one-tube regenerative receivers, and early ham transmitters were common hobbyist projects, the Fahnestock clip became the terminal of choice for most builders. It was practically standard equipment on everything from introductory science kits to early educational radios. Young experimenters could easily connect headphones, antenna wires, or coils without a soldering iron—an important consideration when the average kid didn't have access to a workshop full of tools.

The popularity of the clip soared during the 1920s and 1930s, in part because of its use in radio education and military training gear. It was also a staple of "build it yourself" radio books and mail-order kits. Many of those classic ARRL projects from the pages of QST and the Handbook featured both binding posts *and* Fahnestock clips

Despite the emergence of banana jacks, terminal strips, and more modern connectors, the Fahnestock clip never quite vanished. Its continued presence even into this century speaks to its genius—rugged, low-cost, and pretty much idiot-proof. In today's world of complex digital electronics and surface-mount components, you can

STRAY TOPICS OF INTEREST:

The Fahnestock Clip

By W7UUU

still find these clips in places where fast, repeatable wire connections are needed. Some battery holders still use them. They're also found in physics classrooms, test rigs, and retro-style radio projects.

Interestingly, Fahnestock clips have even enjoyed a recent small revival among makers and vintage radio hobbyists. Enthusiasts restoring early regenerative receivers often seek out original-style clips to match the era. For those building "Boy's First Radio"–style sets, using a Fahnestock clip isn't just a practical choice—it's a nod to tradition!

Modern alternatives of all sorts of connector types may offer tighter tolerances or sleeker profiles, but few can match the sheer *tactile satisfaction* of pressing down a springy metal tab and feeling it grip a wire with a decisive click. That satisfying little snap is the sound of nearly 120 years of electrical history still doing its job.

So whether you're wiring up a 1920s breadboard radio or teaching a kid how current flows, the Fahnestock clip remains a charming and reliable bridge between past and present—one that's still worth clipping onto. Best of all you can even buy them on Amazon.com and eBay these days for a very reasonable price.

So there you have it—the low-down on the lowly Fahnestock clip.

-Dave W7UUU





What today is the Kabob Shack in Brooklyn, NY once was the first factory for the Fahnestock Transmitter Co. and their famous clip invented by John Schade—but the Fahnestock Company where he worked got all the credit.

THE WAY BACK PHOTO BOOTH

Highlighted photos from the club's past

Researched & Compiled by the Dave W7UUU



Archive Photo



Radio Club of Tacoma 3rd Annual Banquet—March 18, 1922. Click photo for large zoomable view

THIS MARCH 1922 PHOTOGRAPH FROM THE TACOMA RADIO CLUB'S 3RD ANNUAL BANQUET offers a vivid snapshot of early 20th-century social customs and fashion. The men wear formal three-piece suits with high collars and slicked-back hair, with the few women present wearing modest dresses– several with short, waved hairstyles—some with a hint of elegant "flapper" influence. The long, neatly arranged banquet tables clearly indicate this was a highly organized big event—very likely at a local rental ballroom. Note the fancy lapel tags worn by attendees for identification. Note also the "Radio Club of Tacoma" triangular banners hung from the ceiling. The formal posture and composed expressions of the attendees reflect the *seriousness* and formality of the occasion as well as the photographic conventions of the day (the photo was by Bolland Studio, a major commercial photographer based in downtown Tacoma, WA). Though men dominate the scene—as was typical of early amateur radio much as it is today—the presence of women indicates a broader social circle and most certainly a number were early female radio enthusiasts. I can't make her out in the photo, but most assuredly Winnie Dow, 7CB is in this room. If you read the article in a recent Logger's Bark, you'll recall that Winnie was the first female amateur radio operator in the entire 7th District. Her original call was 7FG but when ham radio was prohibited and all licenses canceled during WWI, she had to reapply after the war and was assigned 7CB. Overall, the event really reflects a structured, respectful, and quite formal culture around a still-young technological hobby. So different from how such an event would most likely look today!

MIGHTY DK! QSO REPORT

Reporting all the HF QSO action from the club



EACH MONTH in the Bark, the Radio Club of Tacoma recognizes the members and guests who have made non-contest QSOs using the HF stations at our clubhouse. Saturday Open House, especially, is a time when members have access to this equipment. Why not sit down at one of our operating desks and make a contact or two? Assistance is almost always available for those unfamiliar with the equipment, and if your license class doesn't permit HF operation, ask the denizens of the HF Room or the Saturday clubhouse host to help you find a suitably-licensed control operator to sit with you. It's a feather in the club's hat for the call sign of The Mighty DK to be heard on the airwaves. So get on the air and get your name in the Bark! (Don't forget to *enter your call sign as the operator* into our logging program.) ■ *-editor*

Clubhouse QSOs during this period:

NAME	CALL	QSOs
David	AC7KP	22
David	W7GEL	9
Gary	WG7X	8
Becky	KG7FZH	8
Leah	K7IPT	6
John	K2CCT	2
Julie	W7JUL	1
Al	N7OMS	1



Above: HF Room Flex 6600 & Mercury III

Below: HF Room Icom IC-7610 & KPA-500



Photos this page provided by Dave W7UUU

THE FUNNY PAPERS

Ham Humor for Humorous Hams







RETURN TO HOME PAGE

HOW'S DX?

DXpeditions and Notable DX operations



WEB

NG3K Upcoming DXpedition Calendar

June						
2025 Jun01	2025 Jun10	Faroe Is	OY	LoTW	DXW.Net 20240619	By WB2REM W9MK W2WCM G6TFL VO1IDX K3BAB K4LT W4VKU as OY6FRA OY6A OY/W9MK OY/K4LT; 160-6m; CW SSB FT8 FT4; QRV for ARRL VHF Contest; QSL via Club Log OQRS or WB2REM
2025 Jun04	2025 Jun18	St Martin	FS	LoTW	TDDX 20250125	By K9EL as FS/K9EL; 40-6m; holiday style operation; QSL via Club Log OQRS
2025 Jun06	2025 Jun11	Palau	T8	See Info	DXW.Net 20250303	By JH1MLO as T88HR and JR1FKR aas T88TJ fm Koror I (OC-009, PJ77fi); 80-6m; SSB FT8; QSL via JH1MLO & JR1FKR respectively (B/d), LoTW OK for T88TJ
2025 Jun06	2025 Jun13	Jersey	MJ NEW	M0URX	M0URX 20250501	By ON4ANN + ON team as MJ/OP2D; HF; SSB CW FT8
2025 Jun11	2025 Jun27	French Polynesia	FO	LoTW	DXW.Net 20241210	By G0VJG as FO/G0VJG fm Bora Bora I (IOTA OC-067); HF + 6m
2025 Jun11	2025 Jun28	Vanuatu	YJ0RS	LoTW	DXW.Net 20250322	By ZL1RS; 6m, perhaps 10m; FT8 EME; QSL via ZL1RS
2025 Jun14	2025 Jun16	Ogasawara	JD1BQP	JP1IHD Direct	OPDX 20250401	By JP1IHD fm Chichijima I (IOTA AS-031 QL17cb); mainly 6m; SSB FT8 FT40
2025 Jun18	2025 Jul09	Guatemala	TG NEW	LoTW	TDDX 20250501	By AF4CZ as TG9/AF4CZ; 40-10m;; FT8 FT4, perhaps SSB; spare time operation
2025 Jun19	2025 Jun23	Palau	T88PB	LoTW	OPDX 20250417	By JA0JHQ fm Koror I (IOTA OC-009, PJ77fi); HF; QRV for All Asia DX CW Contest; QSL via JA0JHQ direct
2025 Jun28	2025 Jul14	St Pierre & Miquelon	FP	LoTW	TDDX 20241219	By KV1J as FP/KV1J fm Miquelon I; HF + 6m; mainly SSB FT4 FT8, some CW; QSL via KV1J (B/d) or Club Log OQRS

Click anywhere on the table above to visit Bill's site directly—the hyperlinks will be active there.

Courtesy Bill Feidt, NG3K
used with permission

RETURN TO HOME PAGE

email loggersbark@gmail.com

Homebrew & Kits corner

RADIO HOMEBREW PROJECTS BOTH LARGE & SMALL

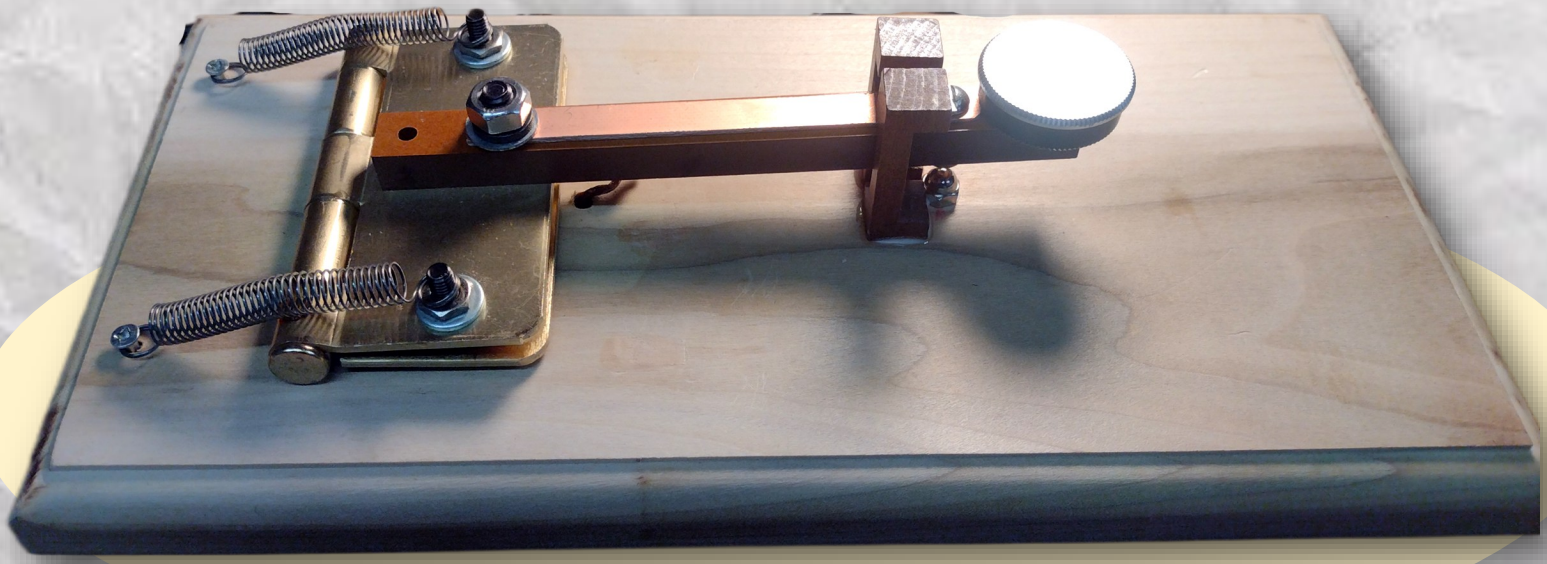
PROJECT PROFILE

UNHINGED... that's the title of this project from long-time QST technical writer and published author Eric Nichols KL7AJ, with many books to his credit on both the writing and editing side. He's not only a writer, but an educator, inventor, maker, and shopkeeper—running his online business at www.alaskit.net from frigid Fairbanks, Alaska.

Eric recently published this wonderful homebrew key project on QRZ with the following blurb, "I was cleaning out the shop and found a couple of heavy brass hinges still in their original flavor-fresh wrappers. I had no use for them so I thought about what could possibly be made out of something brass... so I made a straight key. Not the first one I've ever made, but probably the best—at least from nothing but spare parts. Oh, and it works too!"

It looks fabulous, Eric—nicely done! Maybe I'll catch you down the log on CW and I can use one of my homebrew keys for a "homebrew key to homebrew key" QSO!

-Dave W7UUU



"Unhinged" Key & photo by Eric KL7AJ



FIFTY YEARS AGO, JUNE 1975, THE 2M FM CRAZE in amateur radio was really ramping up and hams everywhere wanted to get in on the repeater action. Wilson Electronics at that time was one of the leading suppliers of handheld 2m radios. They weren't a particularly old company, and didn't stick around all that long. But for the early years of the "repeater revolution" in ham radio, they were the go-to brand for many hams. As a young 14 year-old Novice at the time (WN7AWK) I could only dream of a radio like this!

So what did your $199.95 get you back then ($1100 today)? The **Wilson 1402SM** 2.5 watt HT! By today's standards, it was large (several pounds with batteries) and primitive. It was crystal-controlled, requiring a pair of crystals for each of the six channels—one crystal for transmit, one for receive. So for 146.52 Simplex, you needed two crystals, both the same frequency (which it came with). But for the main W7DK club repeater, you would need a crystal cut for 147.28 on the receive side, and one cut for 147.88 on the transmit side. Back then, there were no PL tones (and no programming, memories, not even a built-in flashlight or FM broadcast radio like on a Baofeng today!).

But despite all that, the Wilson 1402SM was a big seller and many hams I knew had one. I even got to use one owned by a friend (Nick WA7IVO, later K7MO) and thought it was the coolest thing ever!

Alas, it was not made in the U.S. but rather in Japan, and imported by Wilson Electronics in Nevada.

-Dave W7UUU



June 1975 ad from 73 Magazine featuring the Wilson 1402SM 2m HT

RETURN TO HOME PAGE

email loggersbark@gmail.com



"ZENITH COSTS MORE BUT DOES MORE" was the advertising slogan of the day, back in June 1925 when the new 4R and 3R receivers came on the market. Starting at just $100, prices climbed all the way to $475 for the top-end Super-Zenith X model. That version featured a built-in loudspeaker with twin woofers and HF horns—tubes and batteries not included! That range works out to roughly $1826 at the lowest to an astounding $8676 for the X-version, in todays dollars…. All for a radio that only received the AM broadcast band.

Per the ad, "The difference between a radio set that works—even one that works well—and a Zenith, is the difference between always longing for something better and the supreme pleasure of owning the best that money can buy".

Indeed! And today, collectors will still pay top dollar for a Zenith 4R, 3R or the vaunted Super-Zenith X model. These radios have become some of the most sought-after AM BCB radios of the dawning years of wireless.

-Dave W7UUU



RETURN TO HOME PAGE

email loggersbark@gmail.com

TNT THE NEW HOT THING



Hot and new products to think about

W7UUU



Yaesu FTX-1F Field Transceiver

Yaesu FTX-1F Review—as sourced around the Web

The new Yaesu FTX-1F marks the company's return to the portable HF transceiver market following the discontinuation of the beloved and iconic FT-817 and FT-818 radios. Much like those classics, the FTX-1F aims to be a rugged, full-featured rig that covers HF through UHF, but this time with a more modern architecture.

It's built around SDR technology, includes a sharp touch display, and features a QRP output comparable to the Icom IC-705. But the buzz among hams is far from unanimous. The reviews on the web are all over the board—some are excited by what looks like a fresh step forward, while others are skeptical—questioning whether Yaesu has done enough to justify the announced hefty price tag of $1,499.95

The FTX-1F is built for multiband, multimode operation across the HF, 6 meter, 2 meter, and 70 centimeter bands. It supports all modes: SSB, CW, AM, FM, and Yaesu's own System Fusion implementation of C4FM digital voice mode. The design reflects a clear emphasis on portability: the radio includes an internal 6400 mAh lithium-ion battery pack and puts out 6 watts with it, but can deliver up to 10 watts when connected to an external DC power source. While that power level isn't a game-changer, it's well within the expectations of portable and QRP operators who value battery efficiency over brute force.

Here are the known specifications as of May 2025:

The 4.3-inch touchscreen display is a standout feature. It's large enough to show multiple parameters, waterfall or spectrum scope data, and user menus all at once, which should help minimize menu diving in the field. The interface is said to be responsive, though that remains to be seen in real-world use. Yaesu has also included dual independent receivers, allowing simultaneous monitoring of different bands—a big plus for operators who enjoy cross-band activity, DX hunting, or keeping an ear on local repeaters while working HF.

Frequency Coverage:	HF, 50Mhz, 144MHz, 430MHz Wide-range receive from 30KHz to 174 MHz, 400-430 MHz
Operating modes:	SSB, CW, AM, FM C4FM Digital
Output power:	6 watts w/internal battery 10 watts w/external AC power
Architecture:	SDR Software-Defined Radio
Display:	4.3" High-res color touchscreen
Battery:	Internal 6400mAh Li-ion
Dual Receivers:	Yes, independently controlled
Antenna Tuner:	Optional accessory
Cooling Fan:	Optional accessory

Initial reactions from the amateur community are mixed. Many hams on forums like QRZ.com have praised the FTX-1F's forward-looking design and the return of Yaesu to

TNT THE NEW HOT THING

Hot and new products to think about



W7UUU

the all-band, all-mode portable market. The dual receivers and SDR foundation are seen as major enhancements over the now-dated superhet design of the FT-817/818. Some of the reviewers I've read are particularly happy to see C4FM support included, a nod to Yaesu's System Fusion users who've felt underserved in the portable market.

But not everyone is convinced. A recurring criticism is the absence of features that competitors have already made standard. The Icom IC-705, often cited as the FTX-1F's main rival, includes Wi-Fi, Bluetooth, GPS, and D-STAR—



Yaesu FTX-1F Rear panel view
Photo: Yaesu

all baked in from the factory. The FTX-1F lacks ANY of those, which feels like a step backward to some users who expect modern radios to be more than just RF boxes. Other reviews I found express that Yaesu missed the opportunity to include a built-in antenna tuner, something that's long been wished for in portable transceivers. (I have an Icom IC-705 which also does not include a tuner, but it's no big deal to pack the AH-705 that interfaces very easily. Perhaps Yaesu will offer similar.)

A big concern is the price—the FTX-1F is now on GigaParts for preorder at $1,499.95. At that price, most hams expect more power, more features, or both. That's pretty steep for what this radio is. Some have gone so far as to call the radio a "repackaged FT-991A" with stripped-down power, and a few have labeled it a missed opportunity if it's not priced competitively against the IC-705, which retails for around $1300.

Nevertheless, there's a lot to like here. The radio's form factor is nice and compact, and at just a few pounds, it's quite portable . There is also a planned optional 100w external amplifier called the SPA-1 (I could not find an announced price for this).

For POTA/SOTA it does check a lot of boxes. But not all of them. The lack of integrated conveniences like Wi-Fi, Bluetooth, and antenna tuner might not matter to everyone but will certainly matter to some… who will most likely go for the IC-705 that has those features already going for it, at a better price.

The FTX-1F is currently slated for release in late Spring 2025, pending FCC type acceptance. While we await real-world tests and teardown videos, the radio remains a promising but somewhat polarizing entry. Yaesu appears to have listened to the community's desire for an FT-817 successor, but whether the FTX-1F fills those shoes or just borrows the boots remains to be seen.

For now, I will keep my IC-705 (as I think many hams will) and see how the FTX-1F evolves over time.

-Dave W7UUU

[This article was written in late April so subject to a number of changes that have surely occurred since then]

EMERGENCY COMMUNICATIONS

Amateur Radio EmComm News & Topics

JOIN A COMMUNITY EMERGENCY RESPONSE TEAM (CERT)

by Doug Schafer, AB7DG

The Community Emergency Response Team (CERT) program began in 1993, and is now a FEMA Citizen Corps program offered by sponsoring fire departments and other local agencies throughout the US and its territories. The CERT basic course educates people about disaster preparedness for hazards that may impact their area and trains them in basic disaster response skills, such as fire safety, light search and rescue, utility safety, team organization, and disaster medical operations. Using the training learned in the classroom and during exercises, CERT members can assist others in their neighborhood or workplace following an event when professional responders are not immediately available to help.

After completing a basic CERT course, a citizen is better equipped to aid their nearby neighbors in a disaster. And if their sponsoring agency supports ongoing teams of CERT-trained citizens, they may join such a team to participate in additional training, exercises, public service events, and in whatever way the sponsoring agency utilizes its CERT volunteers. The CERT program offers a consistent, nationwide approach to volunteer training and organization that professional responders can rely on during disaster situations, allowing them to focus on more complex tasks.

CERT training is provided free to interested members of the community, and is delivered in a group classroom setting, usually in eight evening 2.5 hour sessions. People may complete the training without obligation to join a CERT. Citizen Corps grant funds can be used to print and provide each student with a printed manual. Some sponsoring agencies use Citizen Corps grant funds to purchase disaster response tool kits. These kits are offered as an incentive to join a CERT, and must be returned to the sponsoring agency when members resign from CERT.

CERT is a national program in the United States, and exists in all 50 states, all U.S. territories, and many Native American tribal nations as well. So if you are not local to the coverage of *The Logger's Bark*, check with your *own* local authorities or contact FEMA directly at 1-800-621-3362 who can steer you to your local CERT program.

Locally to the Tacoma, WA area, CERT classes and CERT activities are sponsored by the following:

City of Puyallup Fire Dept., see https://www.cityofpuyallup.org/2204/Puyallup-CERT

City of Gig Harbor Fire Dept., see https://www.gigharborfire.org/education-and-events/personal-safety/emergency-preparedness/

West Pierce Fire & Rescue, see https://www.westpierce.org/cert/

South Pierce Fire & Rescue, see https://spfr.org/cert/

Pierce County Department of Emergency Management sponsors a similar program for neighborhood groups, called Pierce County Neighborhood Emergency Teams. see https://www.piercecountywa.gov/2297/Neighborhood-Preparedness and https://piercewacert.samariteam.com/

Additional links about FEMA's CERT program:

https://en.wikipedia.org/wiki/Community_emergency_response_team

https://www.fema.gov/emergency-managers/individuals-communities/preparedness-activities-webinars/community-emergency-response-team

https://servewashington.wa.gov/programs/cert-community-emergency-response-team

■ -*Doug AB7DG*



Plan Now: Upcoming POTA!

By BJ KO7T

RADIO CLUB OF TACOMA POTA 2025 Schedule

This past year, the club hosted 11 POTA activations at 7 different parks, and we have BIG plans for 2025!

The Club's POTA Chairman, BJ KO7T, is always looking ahead for fun new parks in the state to activate. It's always a great way for members to get involved with amateur radio while enjoying the great outdoors here in Washington State!

Here's the upcoming schedule:

PARK: Illahee state Park
DATE: June 15, 2025
TIMES: 10:00 AM PDT

PARK: Saint Edward State Park
DATE: July 20th
TIMES: 10:00 AM PDT

Everyone is invited to come to our POTA activation events. It's a great opportunity to learn about different antenna types, setting up and tuning antennas with loading coils and/or a counter-poise, learn about different digital modes, and other topics related to portable operations. We usually have 3 to 5 stations set up running many modes on multiple bands. We encourage prospective hams to get on the air, and those with Technician licenses to operate on different bands with a control operator. For club members with a General license, we even have a portable POTA kit that is available to check out from the club the Saturday prior to our club activations. Please see or email BJ Rollison (KO7T) for more information.

-BJ KO7T



BJ KO7T operating at a recent POTA activation

STRAY TOPICS OF INTEREST

Fun stuff for Hams to read!

W7UUU

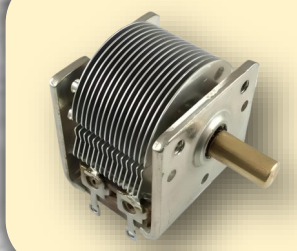
Hidden Word Contest

This month's hidden word is **Variable Capacitor** (OK that's two words! Just pretend it's one, since you need both).

The variable capacitor has been an essential component in radio receivers and transmitters since the early 20th century. It allows for precise tuning of circuits by adjusting capacitance, enabling the selection of specific frequencies in LC (inductor-capacitor) tuned circuits. A typical variable capacitor has a set of fixed metal plates, and interspersed between them on a shaft that extends out the front of the unit to the knob, a set of movable plates. The movable plates are the "rotor" side of the capacitor, and the fixed plates are the "stator" side. The size and number of plates of both types determines the overall capacitance of the device. By turning the attached tuning knob, the plates mesh or unmesh to vary the capacitance. Variable capacitors are found in virtually all radio devices up until the era of the SDR. But even today, variable capacitors are regularly found in manual antenna tuners and tube amplifiers.

Hidden Object Contest

Once again, this month's hidden object is the same as the hidden word: Variable Capacitor. Note that should you see an article about a radio that has a variable capacitor inside of it, that doesn't count! The hidden object will be somewhere hidden where it really shouldn't be.



A typical variable capacitor. The rotor plates are on top, attached to the shaft. The stator plates are on the bottom. Turning the shaft varies the capacitance.

Famous Ham June Birthdays

This month we feature three famous hams who had birthdays in the month of June!

Art Bell W6OBB(SK) was born June 17, 1945. He was best known as the host of his Coast to Coast AM radio show that focused on extraterrestrials and conspiracy theories. But Art was also a very active ham. From his home in Pahrump, Nevada, he ran a big station and massive antenna farm. I actually worked Art the year before he passed away. Be sure to read the full write-up of W6OBB elsewhere in this issue of *The Logger's Bark*.

Chet Atkins WA4CZD (later W4CGP)(SK) Born June 20, 1924, the legendary guitarist and record producer was another long-time ham operator. His later call sign was W4CGP and stood for "Certified Guitar Player" - a title he awarded to only a handful of top guitarists (himself included!)

Burl Ives KA6HVA(SK)—born June 14, 1909. who will ever forget the voice of Sam the Snowman, the narrator of the 1964 Christmas television special, Rudolph the Red-Nosed Reindeer? He was a fairly active ham radio operator, and in his later years had his home and station not far from where I live now, in Anacortes, Washington.



Burl Ives KA6HVA with the character he voiced on Rudolph, Sam the Snowman

13 COLONIES SPECIAL EVENT 2025

IT'S THAT TIME AGAIN! THE 13 COLONIES SPECIAL EVENT is set to return in 2025, offering hams worldwide a unique opportunity to commemorate American history through the airwaves. Scheduled annually from July 1 to July 7, this event honors the original thirteen colonies and celebrates the United States' independence, as well as active military personnel and veterans. It's one of the biggest special events of the year and a lot of fun. I've participated many times, earning a "clean sweep" more than once.

Event Overview:

For this event, special event stations representing each of the original thirteen colonies will be active. These stations use the following unique 1x1 call signs:

- **K2A** – New York
- **K2B** – Virginia
- **K2C** – Rhode Island
- **K2D** – Connecticut
- **K2E** – Delaware
- **K2F** – Maryland
- **K2G** – Georgia
- **K2H** – Massachusetts
- **K2I** – New Jersey
- **K2J** – North Carolina
- **K2K** – New Hampshire
- **K2L** – South Carolina
- **K2M** – Pennsylvania



Additionally, three *bonus* stations will be on the air:

- **WM3PEN** – Philadelphia, Pennsylvania
- **GB13COL** – United Kingdom
- **TM13COL** – France .

Operating Bands and Modes:

Participants can expect activity across all standard HF bands, *including the WARC bands*, with the exception of 60 meters. Simplex operations on 2 meters and 6 meters are also encouraged. The event supports various modes of operation, including SSB, CW, RTTY, and digital modes. The choice of mode is at the discretion of each individual colony state station .

Participation and Certificates:

Operators worldwide are invited to participate. Making contact with just one colony station qualifies for a certificate, while contacting all thirteen colony stations earns a "Clean Sweep" endorsement. Engaging with the bonus stations adds further accolades. Shortwave listeners (SWLs) are also encouraged to participate and can qualify for certificates by logging the stations they hear .

To obtain a certificate, participants should:

- **Download** and complete the log sheet from the event's official website (link below).
- **Include** a $5 (U.S.) donation and a self-addressed label for certificate return.
- **Send the log** sheet, donation, and return label to the designated address provided on the website .

Tips for Success:

- **Plan Ahead:** Review the event's website for frequencies and operating schedules.
- **Log Contacts:** Keep detailed records of all contacts to ensure eligibility for certificates.
- **Explore Bands and Modes:** Use various bands and modes to maximize contact opportunities.
- **Monitor spotting networks** like DX Summit to track active stations .

This Special Event offers a fun and meaningful way for amateur radio operators to engage with history, honor the nation's heritage, and connect with fellow hams. Whether you aim for a single contact or go for a clean sweep, it's a ton of fun!

For more info, visit the event website: www.13colonies.us.

-Dave W7UUU



13 COLONIES SPECIAL EVENT 2025



Here's what the actual "Clean Sweep" certificate looks like. For each of the stations you work, you get a blue star. And for each of the three bonus stations, you get a stamp—and ultimately the "Clean Sweep" stamp as well.

Another fun aspect of this event—if you like paper QSL cards, each of the stations will issue a very handsome card in exchange for an SASE.

-Dave W7UUU



RETURN TO HOME PAGE

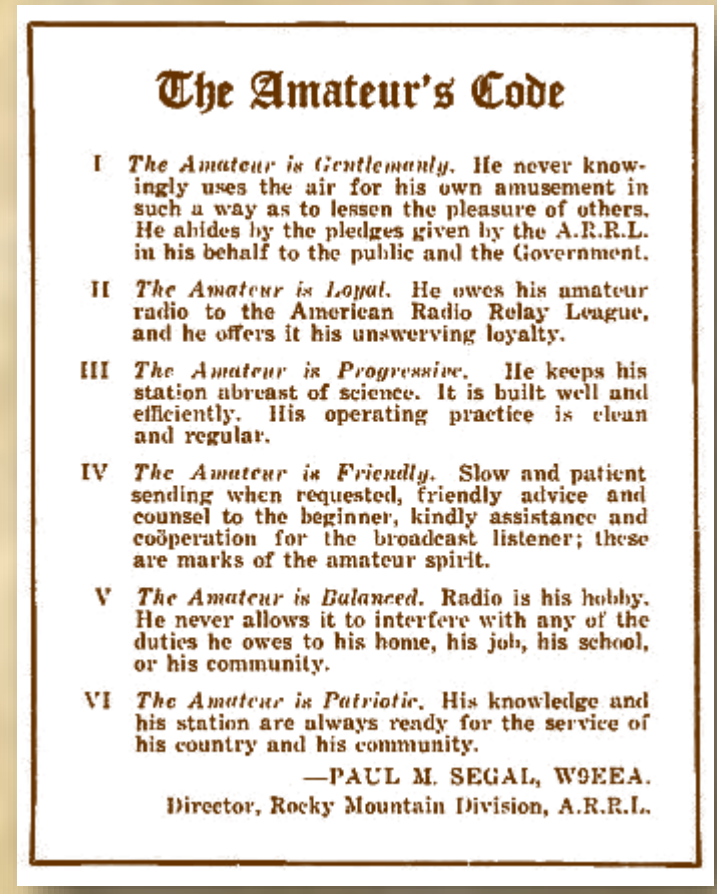
The Amateur's Code and the DX Code of Conduct

MOST ACTIVE HAMS TODAY HAVE HEARD OF THE DX CODE OF CONDUCT... but long before that 2010 set of DX operator expectations was authored came The Amateur's Code.

Back in 1928, when amateur radio was still finding its rhythm amid the exploding world of early wireless experimentation, a young attorney named Paul M. Segal W9EEA decided it was time for the growing hobby to have something of a moral backbone. Segal, who was the General Counsel for the ARRL at the time, penned what became known as "The Amateur's Code." It wasn't about rules or regulations. It wasn't concerned with gear, wattage, or frequency allocations. Instead, it was a kind of aspirational North Star for the operator—an ethical framework that stressed the *character* of the ham more than the capabilities of his or her station.

Segal's code was first published in the ARRL's 1927 edition of The Radio Amateur's Handbook, and reprinted in many later editions, eventually making its way into QST and numerous club newsletters around the country. Over the decades, it's been reproduced in hundreds of websites, ham manuals, and shack walls, and it's still promoted by the ARRL today. Nearly a century on, it continues to resonate.

The code is very simple. It outlines six traits that should define a good amateur radio operator: being gentlemanly, loyal, progressive, friendly, balanced, and patriotic. Each word is given a short but powerful explanation. T o be gentlemanly, for instance, is to avoid knowingly operating in a way that diminishes others' enjoyment. Loyalty is framed as support not only for individual fellow hams but also for one's radio club and specifically, to the ARRL itself. The section on being balanced is especially timeless—reminding hams not to let radio overwhelm duties to family, work, or community. And of course, patriotic—an amateur's station should always be ready to serve community and country if called upon (thanks to all the ARES members!).



The Amateur's Code

I *The Amateur is Gentlemanly.* He never knowingly uses the air for his own amusement in such a way as to lessen the pleasure of others. He abides by the pledges given by the A.R.R.L. in his behalf to the public and the Government.

II *The Amateur is Loyal.* He owes his amateur radio to the American Radio Relay League, and he offers it his unswerving loyalty.

III *The Amateur is Progressive.* He keeps his station abreast of science. It is built well and efficiently. His operating practice is clean and regular.

IV *The Amateur is Friendly.* Slow and patient sending when requested, friendly advice and counsel to the beginner, kindly assistance and coöperation for the broadcast listener; these are marks of the amateur spirit.

V *The Amateur is Balanced.* Radio is his hobby. He never allows it to interfere with any of the duties he owes to his home, his job, his school, or his community.

VI *The Amateur is Patriotic.* His knowledge and his station are always ready for the service of his country and his community.

—PAUL M. SEGAL, W9EEA.
Director, Rocky Mountain Division, A.R.R.L.

The Amateur's Code—from the 1929 ARRL Radio Amateur's Handbook (I was not able to find a 1928 edition—the first year the Code was published by the ARRL)
© ARRL, Inc.

Segal wasn't trying to impose behavior from on high. He understood that the hobby would only thrive if those who participated in it brought to the airwaves a spirit of *mutual respect and decency*. It was a proactive

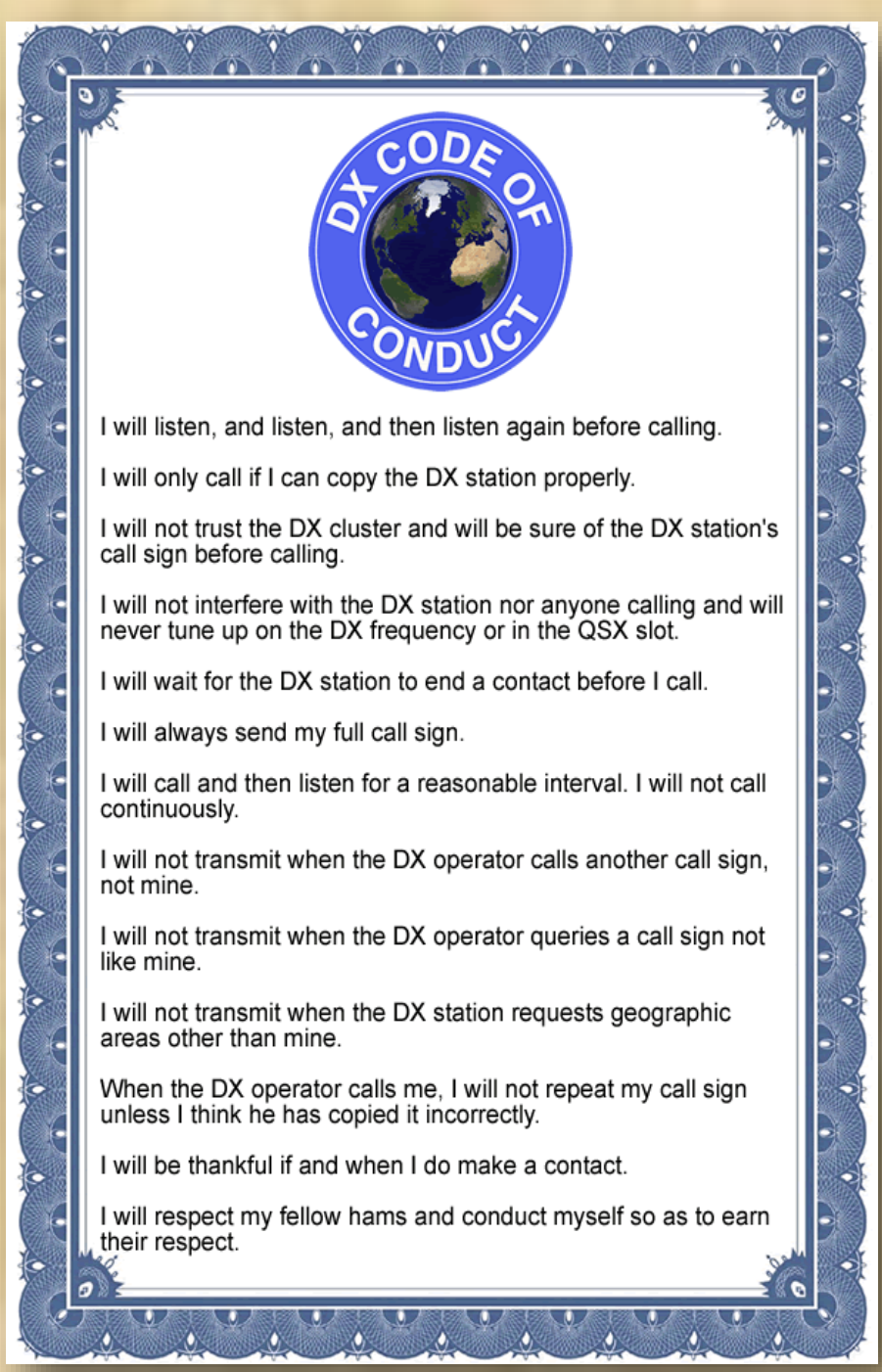
The Amateur's Code and the DX Code of Conduct

stand against the kind of selfish or unruly behavior that, even back in 1928, could emerge on the bands when courtesy took a back seat to big egos and bad attitudes.

Fast-forward a few generations, and that same spirit found a new expression in a different context. As DXing began to evolve beginning in the 1950s—with pileups getting deeper and the competition for rare callsigns growing more fierce—it became increasingly obvious that bad behavior was creeping in. Chasing DX can bring out both the best and worst in an operator. While some treat it as a sporting challenge marked by camaraderie, others push the boundaries of good conduct, leading to jamming, frequency hijacking, and chaotic pileups.

In response to this, around 2010 Randy Johnson, W6SJ, stepped forward and drafted what's now widely known as the "DX Code of Conduct." The code was designed not as a *replacement* for Segal's, but as a complementary set of guidelines tailored *specifically* to the world of DXing. It's gained traction over the past fifteen years, especially among serious DXers who want to keep the experience fair, enjoyable, and respectful for everyone when chasing the rare ones.

Johnson's DX Code of Conduct isn't long, but it's very well thought out.



The Amateur's Code and the DX Code of Conduct

Here it is in full, as originally formulated in 2010:

- I will listen, and listen, and then listen again before calling.
- I will only call if I can copy the DX station properly.
- I will not trust the DX cluster and will be sure of the DX station's call sign before calling.
- I will not interfere with the DX station nor anyone calling and will never tune up on the DX frequency or in the QSX slot.
- I will wait for the DX station to end a contact before I call.
- I will always send my full call sign.
- I will call and then listen for a reasonable interval. I will not call continuously.
- I will not transmit when the DX operator calls another call sign, not mine.
- I will not transmit when the DX operator queries a call sign not like mine.
- I will not transmit when the DX station requests geographic areas other than mine.
- When the DX operator calls me, I will not repeat my call sign unless I think he has copied it incorrectly.
- I will be thankful if and when I do make a contact.
- I will respect my fellow hams and conduct myself so as to earn their respect.

That last line echoes Segal's intent perfectly: conduct yourself in a way that earns the respect of your peers. Both codes, though born nearly a century apart, are anchored by that same foundational truth: It doesn't matter if you're building a breadboard transmitter in 1932 or chasing Bouvet Island in February, 2026.

The Amateur's Code is still widely published today. It's part of the tradition we pass down. And the DX Code of Conduct has earned its own place in that lineage, thanks to advocates like Johnson and others who saw the need for a modern standard rooted in mutual respect.

Neither code is enforceable. They're not laws, nor are they tied to your license class or operating privileges. But that's precisely why they matter so much. They represent what we choose to be, not what we're forced to be. They're reminders that amateur radio isn't just about propagation paths or equipment specs—it's also about character.

In a world where it's easier than ever to transmit a signal around the globe, it's worth remembering that the tone and intent of that signal still matters. Whether you're calling CQ on 40 meters, working a DXpedition in a split pileup, or checking into a local net, you're an ambassador for the hobby every time you key the mic, click the FT8 mouse or hit the Morse paddles.

Segal would be pleased that his 1928 ideals have not only endured but inspired new generations of amateurs to think about the bigger picture. Courtesy, patience, humility, and respect never go out of style—they're just as important as a good antenna match or a clean signal. And in the end, when we all operate with that in mind, we make the hobby better for everyone.

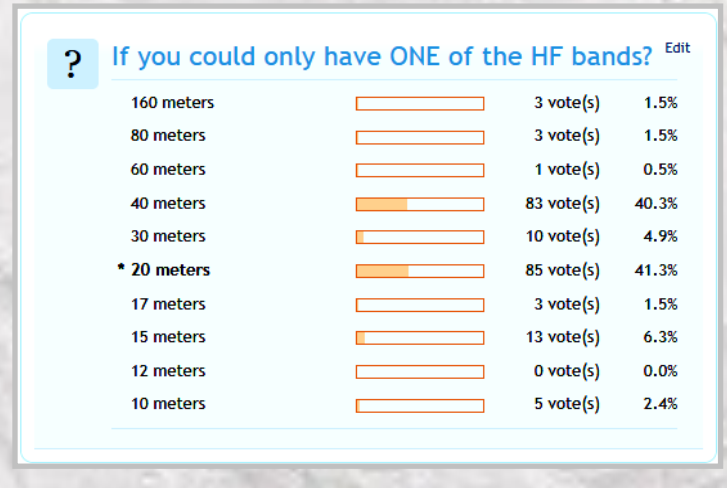
-Dave W7UUU

STRAY TOPICS OF INTEREST

Fun stuff for Hams to read!

W7UUU

Survey Center!



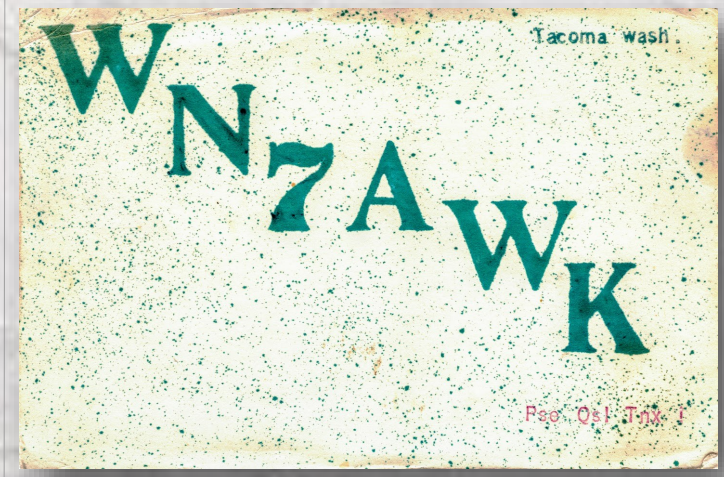
THIS MONTH'S TOTALLY UNSCIENTIFIC POLL is largely hypothetical in its intent—"If you could only have ONE of the HF bands, which would it be?" Of course, in years past it wasn't at all uncommon for new hams to have to do just that: pick a band to get started. This was simply due to limitations on putting up antennas. That was certainly the case for me when I got started back in 1975. I made the decision to put up as my first antenna a 40m dipole, which I knew would also work well on 15. Since I was a novice, and didn't have the space for an 80m dipole, I figured "two outta three ain't bad" (novices only had 3 bands back then—80, 40, and 15—CW only).

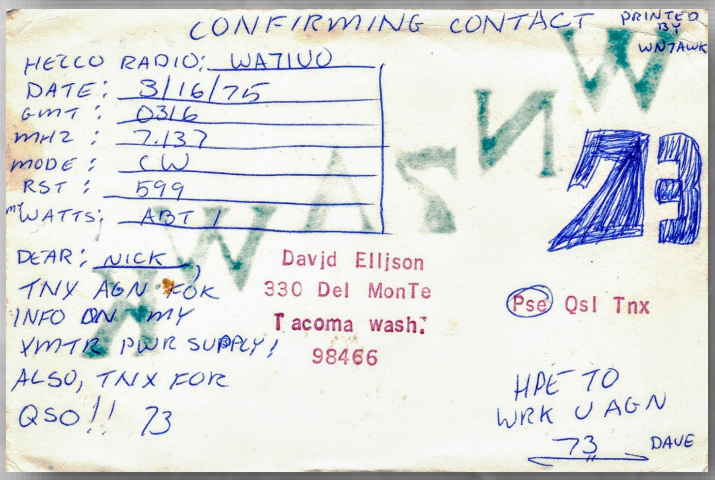
It's interesting to note that the two bands I fully expected would be popular were actually HUGELY popular: 40 and 20 meter bands, with 15 as a distant third place. So in the end, the original "Novice bands" of yore in fact are still the most popular bands by far! At least when the question is presented in the way this survey is, anyway.

The only band that got a goose egg is 12 meters, after nearly two months running.

-Dave W7UUU

QSL Card of the Month





HOW OFTEN DOES A HAM ACTUALLY GET BACK the very first QSL card he ever sent out? Pretty rare I would have to think. But I have mine now! Nick WA7IVO (K7MO) - my best "ham radio friend" for over 50 years—passed away on March 6th. His wife Anna K7ANA was very gracious and let me have the QSL card. Nick had kept it all these years. He was my very first contact, with me running my HW-7 that I'd built myself in January 1975 when I was only 13 years old. I really miss Nick… it's nice to have this card safe and sound now in my shack. *-Dave W7UUU*





IF YOU'VE READ *THE LOGGER'S BARK* much in the past year and a half, you most likely would have noticed a lot of photos of early W7DK Field Day events (including a wonderful full-color & sound film now available to view on YouTube). These events took place for almost two decades on the farm of Joe Asplund, W7IG, in Eatonville, WA in the shadow of Mt. Rainier. Joe had a large farm (the animal kind as well as the antenna kind!) on many acres—the perfect place for Field Day events. He was also a pilot, and owned his own airstrip (featured in a number of those Field Day photos from the past). His shack changed a lot over time, but the shack in this photo was from the mid-1950s, with his HQ-140X receiver (right, beneath his call sign) and his E.F. Johnson Ranger transmitter driving a homebrew KW amp in the big rack. The club has a number of photos of his shacks on into later years but this is the oldest I found.

-Dave W7UUU

W7OS DOC SPIKE MUSEUM

Featured Gear from the Museum



Photos & Text by Dave W7UUU

FOR YEARS WHILE PERUSING THE W7OS MUSEUM at the Radio Club, I've admired the small radio with understated WWII elegance: the EC-1 receiver sitting high atop a bookcase. Once upon a time I owned one of these and even then thought it a fun little radio to use. But I never knew its historical place in the radio world.

The Echophone Commercial EC-1 is a neat little piece of radio history that blends wartime ingenuity with easy-to-use design. Introduced in late 1940 by Hallicrafters under the Echophone brand, it was marketed as "The New Wonderbox" and priced at an affordable $19.95. This low price point made it an attractive option for servicemen and their families during World War II. Hallicrafters, founded in 1932 by William J. Halligan in Chicago, was known for producing quality radio equipment, and the EC-1 was no exception.



Echophone EC-1 Receiver from the W7OS Museum Photo by Dave W7UUU

The EC-1 was designed to be very easy to use, and function adequately for folks to hear shortwave stations well. It featured a six-tube superhet circuit and covered three bands ranging from 540 kHz to 30 MHz, which included the AM broadcast band and two shortwave bands. The receiver included a beat frequency oscillator (BFO) for receiving Morse code and of course could be turned off for AM shortwave and BCB reception. During the war, the EC-1 earned the nickname as the "morale radio" as it was marketed to cheer lonely troops abroad as well as their families back home. Other radios also had that monicker, including the Minerva Tropic Master. Such radios provided GIs with a vital connection to news and entertainment from home. Hallicrafters even facilitated shipping the radios directly to servicemen overseas. The company's advertising campaign featured a fictional character, Private Hogarth, whose EC-1 made him popular among his peers (and more importantly, the young ladies he encountered!).

In terms of performance, the EC-1 was very well-regarded for its time. When properly aligned, it could match the performance of the later Hallicrafters S-38 series (granted, that's probably not saying much but it's still a decent performer for its simplicity). However, some limitations were pretty evident. The BFO, for instance, was known to produce an audible hum and lacked the injection strength needed for clear single-sideband reception (in later years when SSB become more prevalent). Additionally, the dial resolution was somewhat vague, and lacking any IF filtering, tuning was very broad and stations often interfered with each other.

Despite these shortcomings, the EC-1 was praised by users at the time for its reliability, low cost, and ease of use. More than 50,000 EC-1 receivers were sold and a great many are still around today. You can often find them on eBay and at ham fests for well under $100. Its design is straightforward (just a variation of the All-American-Five) and very easy to restore to full operation. Just be aware: it's an AC/DC design meaning depending on how the plug is inserted into the AC outlet, it can have a hot chassis. I always recommend using a 1:1 isolation transformer for such receivers for the sake of safety.

W70S DOC SPIKE MUSEUM

Featured Gear from the Museum



Photos & Text by Dave W7UUU

A novel "NOTE:" in the owner's manual states:

"The EC-1 Receiver can be used as a code practice oscillator by connecting a key in series with the headphones. The BFO switch should be placed in the CODE position and a broadcast carrier tuned in [to produce a steady BFO "beat note"]. Operation of the key will then provide a signal which will sound like CW code transmission". In other words, by keying the attached key, the beat note will only be heard when the key is closed during formation of a dit or a dah!

A post-war 1946 upgrade to the EC-1 called the EC-1A was introduced, that offered a few improvements—most notably a second separate bandspread dial and tuning knob. But with the original appeal and market for the EC-1 being centered around the war, sales of the EC-1A were pretty slim by comparison, making it a much less common find today.

-Dave W7UUU


ECHOPHONE RADIO CORPORATION
201 East Twenty-Sixth Street
Chicago, U.S.A.

INSTRUCTIONS FOR INSTALLATION, OPERATION AND SERVICE

MODEL EC 1
Echophone Commercial

6 TUBE AC-DC THREE BAND 545KC-30.5 MC RADIO RECEIVER

Echophone Radio Corporation was purchased by Halligan in 1932 to secure needed patent licenses held by RCA so that he could produce radios under the Hallicrafters brand.



Rear view of the EC-1 showing 6 tubes.
Photo by Dave W7UUU



Closeup of EC-1 tuning dials
Photo by Dave W7UUU

RETURN TO HOME PAGE

email loggersbark@gmail.com

W70S DOC SPIKE MUSEUM

Featured Gear from the Museum

Photos & Text by Dave W7UUU







THE ECHOPHONE EC-1 RADIOS WERE BROADLY MARKETED TO THE GIS DIRECTLY, as well as in mass print media back home to the families of soldiers abroad. Most of the ads featured a fictional Private (later a Corporal) Hogarth. Hogarth was always portrayed as a nerd with thick eyeglasses. But because he had an Echophone EC-1 to listen to, he was always a hit with the pretty girls who wanted to be around him to listen to his radio. EC-1 ads with this ongoing theme were everywhere—if you Google "Echophone EC-1 Advertisement" you can find many of them. While pretty silly in concept for today's audiences, during WWII the nerdy guy with a shortwave receiver may well have been the hit of any room where there were young ladies wanting to hear far away stations with news of the war around the world. *-Dave W7UUU*

W70S DOC SPIKE MUSEUM

Featured Gear from the Museum



Photos & Text by Dave W7UUU

IN THE FINAL MONTHS OF WORLD WAR II, the FCC introduced a bold plan: the Citizens Radio Communications Service (CRCS), a new radio service intended to bring short-distance personal and business communications to the public. Proposed in 1945, it was to occupy the 460–470 MHz portion of the UHF spectrum—an area relatively unused at the time—and operate using amplitude modulation (AM), with early FM also being considered.

The CRCS was envisioned as a non-technical radio service that would allow individuals and small businesses to communicate locally without the complexity or technical testing requirements of a traditional amateur or commercial license. The FCC hoped this new band would encourage practical radio use by everyday Americans, much like the telephone. The plan divided users into two classes: Class A licensees would use slightly more powerful, fixed-base and mobile equipment (originally up to 60 watts), while Class B users were limited to handheld, lower-powered gear for very short-range use.



Despite its promising vision, the original CRCS concept never really took hold. UHF technology in the mid-1940s was expensive and unreliable for mass-market use, and few manufacturers built affordable equipment for the new band. The propagation characteristics of 460–470 MHz were also less favorable for longer-range communication, especially in rural areas.

Echophone Radio Co. (a Hallicrafters division) was all set to start producing radios for this market (see 1945 ad this page) but the realities of creating such a product at an affordable price made it unrealistic to pursue. The FCC ultimately divided up the 460 MHz spectrum for more well-heeled commercial interests and the CRCS band never took hold. Despite thousands of radios being sold for this band, it never reached a critical mass. It wasn't until many years later that CB came to be in the 27 MHz instead of 460, and became the citizens band as we know it today.

-Dave W7UUU

W70S DOC SPIKE MUSEUM

Featured Gear from the Museum

Photos & Text by Dave W7UUU

ECHOPHONE EC-1

Schematic is very similar in concept to the ubiquitous "All American Five" 5-tube AM table receiver that was sold by virtually every brand of radio at the time.

But instead of just offering RF and Oscillator coils for the broadcast band, radios of this design added coils for additional bands of coverage into the shortwave bands.

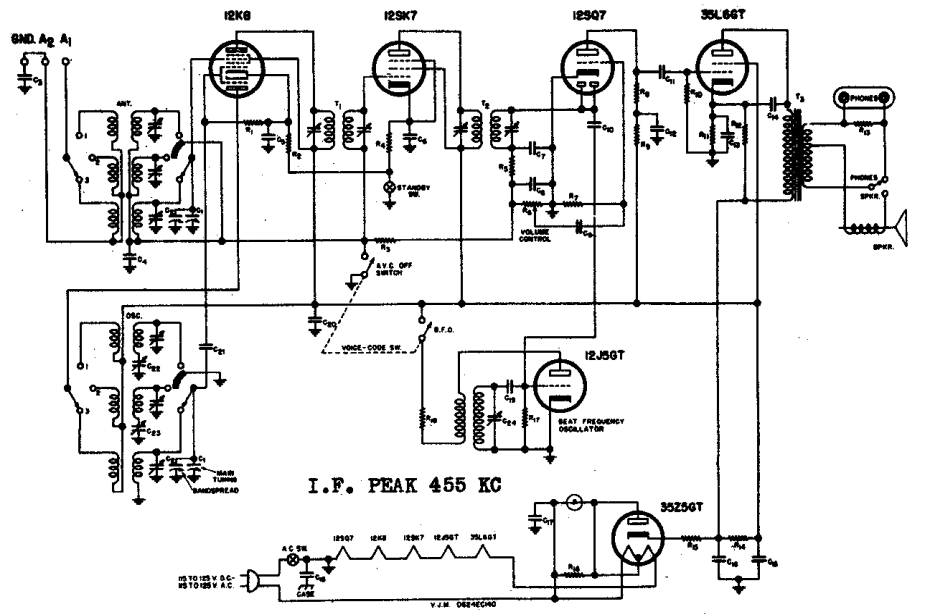
Build quality of the EC-1 was considerably higher than the typical AM BCB All American Five radio of the time, but despite that sold at a very reasonable $19.95 (about 20 hours working wage for a typical hourly worker during WWII).

Over 50,000 EC-1 receivers were sold during the war. Many are still around today.

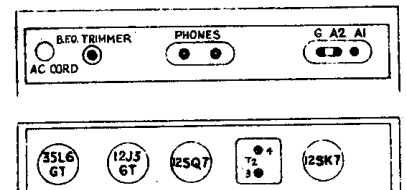
-Dave W7UUU

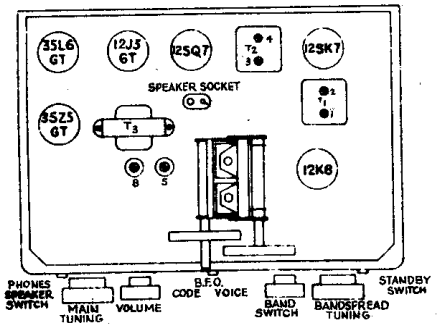
ECHOPHONE PAGE 14-1

ECHOPHONE RADIO MFG. CO. MODEL EC-1

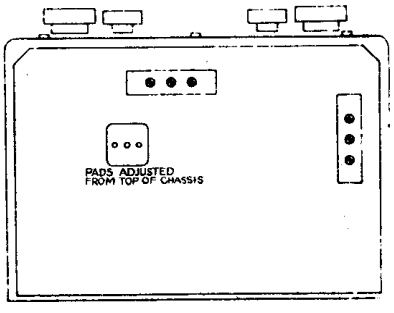


C1	530 mmf	Main tuning	16	40. mfd	150	4	400	
2		Band Spread	17	.02 mfd	400	5	50,000	
3	.01 mfd	400	18	.25 mfd	200	6	500,000	
4	.05 mfd	200	19	150 mmf	Section of C24	7	10,000,000	
5	.02 mfd	400	20	.05 mfd	200	8	250,000	
6	.05 mfd	200	21	50 mmf		9	100,000	
7	100 mmf		22	600 mmf	Pad	10	500,000	
8	100 mmf		23	1,900 mmf	Pad	11	150	
9	.005 mfd	200	24	450 mmf	BFO Trimer	12	7,500	
10	10 mmf					13	15	
11	.01 mfd	400				14	750	
12	.05 mfd	200	R1		50,000	15	25	
13	20. mfd	25	2		300	16	300	
14	.01 mfd	400	3		2,000,000	17	50,000	
15	30. mfd	150				18	500	





TRIMMER LOCATION



©John F. Rider

RETURN TO HOME PAGE

email loggersbark@gmail.com

ANTENNA TIME

All About the Off-Center-Fed Dipole

Dave W7UUU



FOR THIS MONTH'S ANTENNA TIME COLUMN I'LL TALK about another long-time favorite of many hams: the off-center fed dipole, or OFCD.

The off-center fed dipole, or OCFD, is a popular antenna among hams who want one wire antenna to cover multiple HF bands. At first glance, it looks a lot like a regular dipole—just a wire strung between two supports—but the key difference lies in how and *where* it's fed. Instead of being fed at the center like a classic half-wave dipole, the OCF dipole is fed off-center—typically about one-third of the way from one end.

Here's how it works:

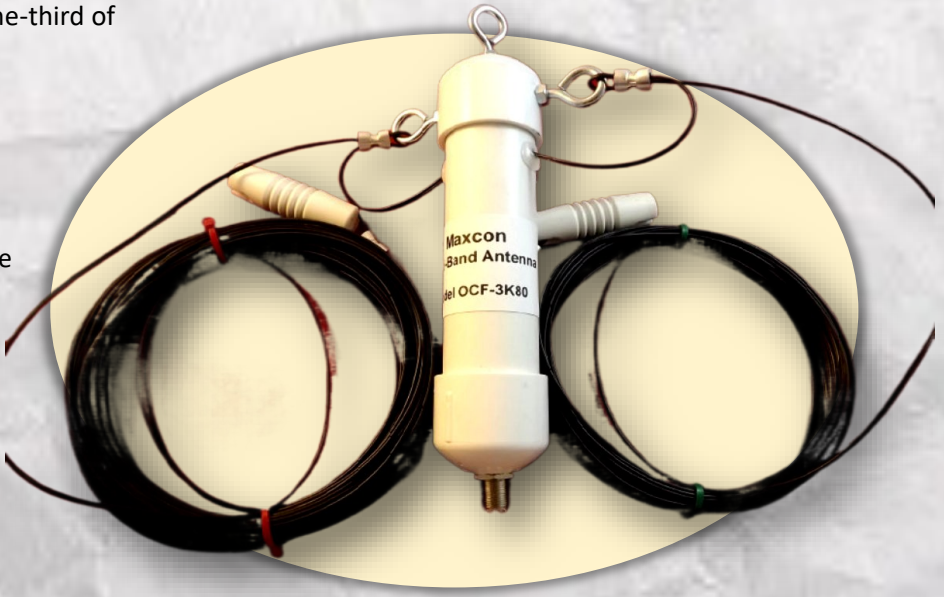
A traditional dipole antenna is cut to be a half-wavelength long on a specific band, with the feedpoint right in the center. That's fine if you're focused on just one band. The OCFD, on the other hand, *is still a half-wave long at its fundamental frequency*, but the feedpoint is moved off-center—usually 33% from one end and 67% from the other. This creates an impedance at the feedpoint that is no longer around 70 ohms (like a center-fed dipole) but closer to 200-300 ohms.

To make this impedance match better with 50-ohm coax, a 4:1 current balun is usually installed at the feedpoint. This helps transform the impedance down to something more manageable and to some degree keeps common mode currents in check.

Because of the way it's fed and its asymmetry, the OCF dipole will also show usable resonances on several harmonically related bands. For example, a 135-foot-long OCFD (roughly a half-wave on 80 meters) will show decent SWR on 40, 20, 17, 12, and 10 meters, sometimes even 6 meters, depending on installation height and local conditions.

One of the biggest advantages of an OCF dipole is obviously its multiband coverage as a single wire antenna. It lets hams operate on several popular HF bands without needing traps or switches (though a tuner will still help fine-tune SWR especially on certain bands). For operators with limited space or who prefer a low-profile setup, this makes the OCFD very attractive.

Installation is also simple. Just get it up in the air—flat, inverted-V, or even sloping if necessary. And because the feedpoint is off-center, it can be more convenient to route coax away from obstructions or buildings.



Typical OCFD—the long side on the left, short side on the right. The 4:1 balun is in the center. While they are really easy to build (see next page), for those who just want to buy one and be done with it, this is the Maxcon Antennas OCF-3K80 that covers 80/40/20/17/12/10 meter bands and can handle up to 1000 watts continuous duty. Click the image to learn more (no affiliation whatsoever). Cost is pretty high: $149.95 + shipping.

ANTENNA TIME

All About the Off-Center-Fed Dipole

Dave W7UUU



However, like lots of things in ham radio, the OCFD has its trade-offs and disadvantages. The off-center feed creates uneven current distribution because the antenna is not balanced like a dipole, which can lead to increased RF on the coax shield—especially if the balun isn't up to the task. That can cause RFI in your shack or household electronics, cause your USB devices to go crazy, and induce other weird problems into your shack—especially at higher power levels. A proper current balun or adding a choke (line isolator) downstream can help resolve this.

Another drawback is that the antenna may not perform all that well on all bands—some OCFDs struggle on 15 meters or show high SWR on oddball frequencies. Also, because of the impedance swings and multiple resonances, it can be sensitive to height, surroundings, and nearby objects.

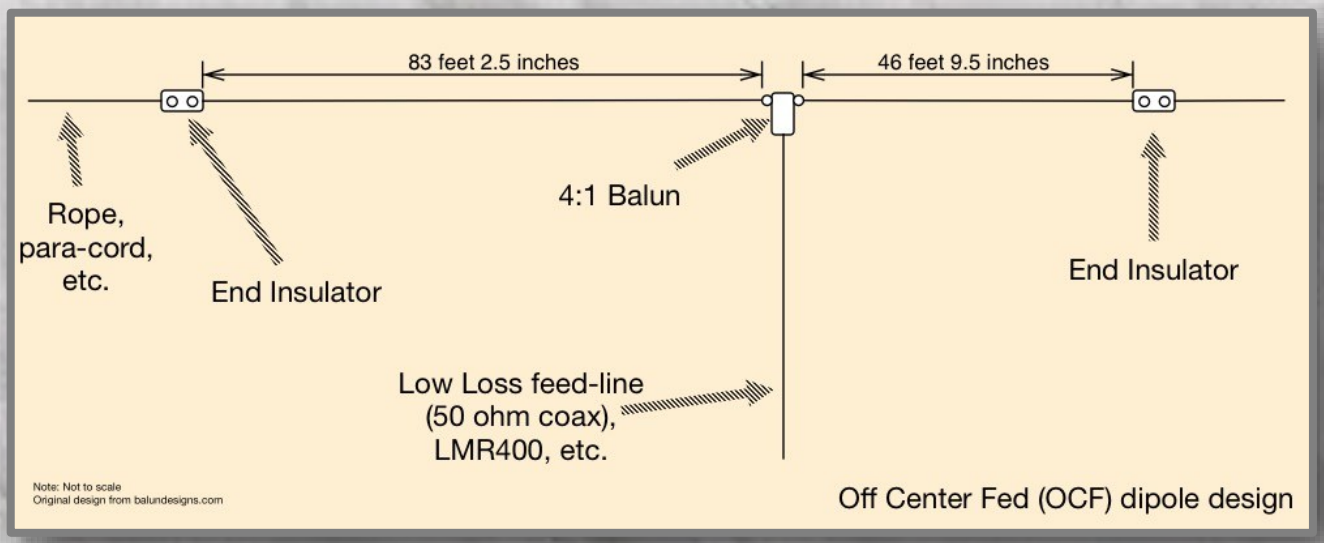
I used an OCFD dipole at my last QTH in an effort to get more band coverage for my station at the time. The results however, for me anyway, were lackluster and I ultimately replaced it with several single-band balanced dipoles which worked better.

It's not a perfect be-all-end all antenna by any means but for a lot of hams, it does get your radio on more bands with a single antenna than other options. I know of many hams who swear by using one. Like so many aspects of ham radio antennas, it comes down to your particular installation and circumstances as to how well it will work for you.

One point of clarity: the OCFD is sometimes referred to as a Windom. Sure, it's closely related—the Windom was also an off-center-fed antenna—but the original Windom (developed in 1929 by Loren G. Windom, W8GZ) was fed with a single wire—not coax. It relied mostly on the earth as the return path as an unbalanced antenna. Understandably though, due to the off-center feed system, the name stuck despite not really being correct.

Anyway, that's our Antenna Time column for this month. See you in July!

-Dave W7UUU



Loudoun Amateur Radio Group illustration of an 80-10 OFCD design—with the 36/64" offset for the feedpoint



10 Most Popular HF Ham Radio Awards

THIS MONTH'S TOP TEN LIST IS ABOUT CONTESTING!

Love 'em or hate 'em, ham radio contests have been a part of the hobby for a great many years and that's not going to change any time soon. In fact, most of the "busiest days in radio" happen during amateur radio contests, most of which occur on the weekends. So with that in mind, the following are the largest amateur radio contests in the world, based by participation as determined by numbers of logs submitted. ■ *-editor*

1	CQ World Wide DX Contest
2	ARRL Field Day
3	CQ World Prefix Contest
4	IARU HF World Championship
5	ARRL Sweepstakes
6	CQ World Wide RTTY
7	Worked All Europe DX
8	All Asia DX Contest
9	ARRL RTTY Roundup
10	CQ-M International DX

Upcoming Ham Fests in the Area

Data published with permission from Lynn at N7CFO.com

June 6, 7, & 8. Wenatchee Apple City ARC Hamfest, Dryden, WA. ***This is an ARRL Sanctioned Event.*** **https://www.applecityarc.com/ Flyer in PDF. Driving instructions and map.**

June 1, 0900-1500. Note date change. Southern Oregon Amateur Radio Club Summer Swap Meet. Fruitdale Grange, 1440 Fruitdale Dr, Grants Pass, OR 97527. The event runs from 9:00 AM to 3:00 PM. There is no admission charge and no vendor fee (bring your own tables). https://www.soarc.org/.

June 14. Port Ludlow ARC Tail Gate Swapmeet. ***This is an ARRL Sanctioned Event.*** **https://www.n7pl.org/**

June 14. Inland Empire VHF Radio Amateurs Second Annual Swapmeet, Spokane, WA. ***This is an ARRL Sanctioned Event.*** **Flyer in PDF.**

July 18-20. Glacier Waterton Hamfest. East Glacier, Montana. ***This is an ARRL Sanctioned Event.*** **https://www.gwhamfest.org/**

July 19 Kenai Peninsula Hamfest, Kenai, Alaska. ***This is an ARRL Sanctioned Event.*** **https://al7le.org/**

July 19. Richmond Amateur Radio Club Swap Meet & Emergency Communications Display, Richmond, BC. https://hambone.ca/rac/events/detail.php?event_ID=2417 http://www.richmondarc.ca/swapmeet2025.html

July 26. Chehalis Valley ARC Swapmeet. ***This is an ARRL Sanctioned Event.*** **Lewis County Fairgrounds 1909 S. Gold Street, Centralia, WA Flyer in PDF.**



Radio Club of Tacoma Ham Fair 1970

HAM TECH 101

By Jim AF5NP

Useful tech info for newer hams and old

Factory HT Antenna (Rubber Ducky)



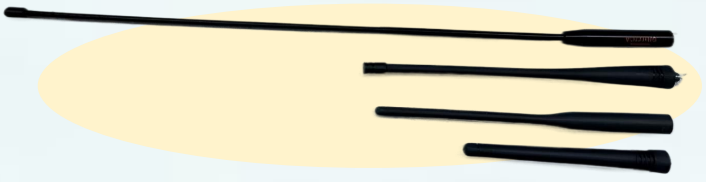
AS A NEW HAM, ARE YOU FRUSTRATED and unhappy over the performance of your handheld transceiver (HT)? Maybe not reliably hitting a repeater, or struggling to make radio-to-radio (simplex) contacts work?

A good place to start is found in our post on HT improvements , where you will learn that the factory/stock antenna is a real limitation to on-air performance. But why is this the case? This post adds a lot of detail to address that question.

T9A04-2018: What is a disadvantage of the "rubber duck" antenna supplied with most handheld radio transceivers when compared to a full-sized quarter-wave antenna?
It does not transmit or receive as effectively

T9A04-2022: What is a disadvantage of the short, flexible antenna supplied with most handheld radio transceivers, compared to a full-sized quarter-wave antenna?
It has low efficiency

As indicated in the 2018 and 2022 Technician class license exam questions and answers, the main reason is that the factory antennas for VHF/UHF handhelds are inefficient, often terribly so. The manufacturers ship HTs with stubby "rubber duck" flexible antennas. Mainly because they mostly work, and likely also because hams often wear their radios on their chest or belt and don't want a 19" thing sticking up. The cynic in me also suggests because shipping a proper 2m VHF antenna requires a 2ft long box, and that makes storage and delivery a lot more expensive.



The photo above shows an assortment of 2m/70cm HT antennas; the lower three in varying lengths are all stock from different radio manufacturers. For reference, a nearly full 1/4-wave whip with excellent performance measures about 16" long.

To make these shortened antennas work at all, they must reasonably match the 50Ω impedance the radio wants to see. The usual trick with shortened antennas is to coil some wire in the antenna to form inductance which offsets capacitive reactance resulting from the shortened conductor. There may be more than one coil inside the casing, along with a small capacitor, depending on construction; the designs vary.

Technically, the rubber duck is a normal mode helix antenna. A surprisingly good Wikipedia article with further links is found here. As with other electrically short antennas the rubber duck has poorer performance due to losses and much less gain than a 1/4-wave monopole.

Why so inefficient? These "rubber duck" antennas are almost entirely coils inside. Antenna coils will convert much of their RF current to heat when transmitting instead of radiating most of the signal as desired. Some hams refer to shortened HT antennas as "rubber resistors" for this reason.

How much loss? It's tricky to say. Ham K0NR actually set up a test to compare and says, "I've measured the radiated signal strength of a number of 2m rubber duck antennas, comparing them to a halfwave antenna. The performance varied quite a bit depending on the specific duck antenna but was in the range of 8 dB to 12 dB worse than the half-wave." For reference, 3dB is half power, 6dB is quarter, 9dB is 1/8, 12dB is 1/16 power, which should give you a good notion of performance. Not even in the same ballpark.

Now, if you are 100ft away from another ham working simplex, it probably won't matter and the rubber ducks will be fine. You're playing in a different ballpark. If you work only UHF frequencies, you may not notice the inefficiency as much as at 2m VHF, as the 1/4-wave antenna for 70cm is much closer to the short stock length. At a distance, or if you're not reliably being heard, the short antenna may be your problem. We recommend that you get a good 1/4-wave whip to have on hand for when it's really needed, especially in an emergency response or similar critical situation.

HAM TECH 101

Useful tech info for newer hams and old

Factory HT Antenna (Rubber Ducky)

If you're curious to see what's inside your factory antenna without destroying it, other hams have done that for us and pics can be viewed below. *-Jim AF5NP*



Above: Antenna from a Baofeng UV-5R exposed
Below: Antenna from a Yaesu FT-1DR exposed. Note the *significantly* higher level of design and construction.
Click any photo to go to the KØNR site for full resolution





SO HOW DOES A HELICALLY WOUND ANTENNA WORK?

A short helically wound antenna, such as those found on handheld amateur radios like the Yaesu FT-1DR or Baofeng UV-5R, operates by winding a conductive wire into a tight helix (corkscrew shape) around a flexible core. This design is known as a 'normal-mode' helical antenna. In this mode, the helix's diameter and pitch are much smaller than the wavelength of the signals it is designed to transmit and receive. The helical winding effectively adds inductance, which allows the antenna to be physically shorter than a traditional straight quarter-wave monopole while maintaining the necessary electrical length for resonance at VHF or UHF frequencies.

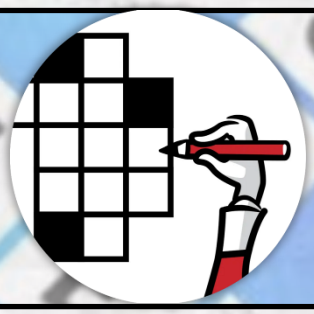
When the radio transmits, current flows through the helical wire, generating electromagnetic fields. In normal mode, the antenna radiates energy primarily perpendicular to its axis, producing an omnidirectional pattern similar to a straight monopole, which is ideal for handheld use. The compact, flexible design makes these antennas practical for portable radios, though the efficiency and range are somewhat reduced compared to full-sized antennas due to their electrically short nature. Their convenience and *reasonable* performance make them the standard choice for handheld transceivers, balancing portability with acceptable signal quality.

Obviously, as the images to the left reveal, there can certainly be *profound* construction quality differences from the low-end to the high-end in antennas of this type. But the UV-5R antennas still do a pretty decent job, all things considered (I own a number of these radios and have never had any significant issues with the antennas).

-Dave W7UUU

FUN AND GAMES!

Crosswords, Word Search, etc.



"Antenna Word Search" Print this page to play!

M	R	E	A	C	T	A	N	C	E	V	O	Y	I	I	H	D
I	B	I	J	C	E	Y	V	H	N	P	T	G	O	S	O	I
I	D	I	P	O	L	E	L	C	B	V	A	F	I	T	G	R
A	A	A	Y	G	G	R	A	O	A	Y	I	D	M	W	N	E
M	O	Q	U	U	M	B	C	M	L	L	Q	S	P	D	I	C
C	L	A	D	D	E	R	E	X	U	S	C	T	E	O	D	T
Y	U	G	A	M	M	A	Y	V	N	Y	Q	B	D	H	N	O
B	S	S	U	R	Z	A	T	L	E	D	R	C	A	H	A	R
N	L	U	H	V	O	S	A	E	S	R	P	M	N	G	T	S
D	A	F	J	C	M	T	M	O	D	N	A	R	C	O	S	V
E	I	I	V	I	R	B	A	D	T	X	Z	G	E	I	D	S
T	D	Y	T	I	A	A	A	T	E	A	F	P	E	G	F	T
A	A	H	E	J	N	Z	F	H	O	Y	Z	B	A	A	Z	E
I	R	E	A	M	V	T	S	T	U	R	M	B	Z	U	K	P
D	R	B	F	I	O	N	O	S	P	H	E	R	E	Q	K	P
A	S	B	N	H	L	N	R	E	S	O	N	A	N	C	E	I
R	P	C	F	H	W	E	R	D	N	A	K	F	Z	A	T	R

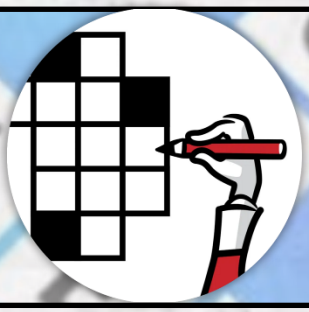
Impedance
Radiate
Quagi
Radials
VNA
Gamma
Reactance
Random
Cushcraft
Beverage
Standing
Director
Smith
Ladder
Andrew
Delta
EFHW
Yagi
ugly
Balun
Rotator
Dish
Dipole
ionosphere
Hex
NVIS
Resonance
SteppIR

RETURN TO HOME PAGE

email loggersbark@gmail.com

FUN AND GAMES!

Crosswords, Word Search, etc.



Answer Key… but don't cheat!

M	R	E	A	C	T	A	N	C	E	V	O	Y	I	I	H	D
I	B	I	J	C	E	Y	V	H	N	P	T	G	O	S	O	I
I	D	I	P	O	L	E	L	C	B	V	A	F	I	T	G	R
A	A	A	Y	G	G	R	A	O	A	Y	I	D	M	W	N	E
M	O	Q	U	U	M	B	C	M	L	L	Q	S	P	D	I	C
C	L	A	D	D	E	R	E	X	U	S	C	T	E	O	D	T
Y	U	G	A	M	M	A	Y	V	N	Y	Q	B	D	H	N	O
B	S	S	U	R	Z	A	T	L	E	D	R	C	A	H	A	R
N	L	U	H	V	O	S	A	E	S	R	P	M	N	G	T	S
D	A	F	J	C	M	T	M	O	D	N	A	R	C	O	S	V
E	I	I	V	I	R	B	A	D	T	X	Z	G	E	I	D	S
T	D	Y	T	I	A	A	A	T	E	A	F	P	E	G	F	T
A	A	H	E	J	N	Z	F	H	O	Y	Z	B	A	A	Z	E
I	R	E	A	M	V	T	S	T	U	R	M	B	Z	U	K	P
D	R	B	F	I	O	N	O	S	P	H	E	R	E	Q	K	P
A	S	B	N	H	L	N	R	E	S	O	N	A	N	C	E	I
R	P	C	F	H	W	E	R	D	N	A	K	F	Z	A	T	R

RETURN TO HOME PAGE

email loggersbark@gmail.com



About this Publication

The Logger's Bark is the official publication of the Radio Club of Tacoma and is published by RCT, PO Box 11188, Tacoma, WA 98411. The Radio Club of Tacoma is a non-profit corporation as defined by law. All proceeds will be used exclusively for charitable and educational purposes. The Radio Club of Tacoma's Club House is located at 1249 Washington St, Tacoma, WA 98405, phone: 253-759-2040.

Emailing Officers

To contact any club officer, simply send an email to their call sign @W7DK.org

Contributions of Articles & Photos

We WELCOME contributions of articles, guest editorials, blurbs, Hints-and-Kinks, shack photos, QSL cards, memorable contacts, anything of interest to your fellow members. Submit your materials via email to: loggersbark@gmail.com or via US mail to PO Box 11188, Tacoma, WA 98411 Nichrome

Radio Club of Tacoma Repeaters

Central Tacoma 2m:	**147.28 + PL Tone 103.5**
Central Tacoma 70cm:	**440.625 + PL Tone 103.5**
Crawford Mountain:	**147.380 + PL Tone 103.5**
North Tacoma:	**145.21 - PL Tone 141.3**

The Loggers Bark ***does not*** accept AI / ChatGPT submissions

Membership Information

- Full-time students, licensed or non licensed, up to age 25 are $20 per year.
- Fees are applicable for the calendar year: January to December
- Lifetime membership is 20 times the yearly fee you are eligible for. Lifetime memberships are calculated based on the FULL and ASSOCIATE rates.
- Visit www.w7dk.org For the latest and most current information on events and activities

MEMBERSHIP APPLICATION

CLICK HERE!

Have a submission for our next issue?

loggersbark@W7DK.org

BOARD OF DIRECTORS

Board-approved minutes from the most recent meeting



Radio Club of Tacoma
Board of Directors Meeting Minutes
April 2nd, 2025

Meeting called to order at _____1900_____.

Officers and Directors Present

__X__	President	Adam Barbera W2NCC
__X__	V. President	Manny Adonis AD7MA
__X__	Secretary	Gary McAdams WG7X
__X__	Treasurer	Doug Schafer AB7DG (Temp)
_____	Board	Dan Vacanti KD7SV
__X__	Board	Dave Ashley W7GEL
__X__	Board	Doug Schafer AB7DG
__X__	Board	Mike Drorbaugh W7MKE
_____	Board	Paul Matney W7PFU

NOTE: These approved meeting minutes are reproduced here without any alterations other than to fit the available space, and to redact dollar amounts per Board rules. All language, punctuation, and spelling are exactly as submitted to the editor.

Quorum? 5 of 9 Officers / Directors needed. ___Y____

Motion for approval of Minutes as previously distributed: Made by Gary WG7X, seconded by Doug AB7DG. Motion approved.

Silent Key or Illness?

Nick Winter, K7MO became a Silent Key Thursday March 6th, 2025. We will really, really miss him… Rosary for Nick was performed earlier this month. (Editors note: Memorial services for Nick May 17th, 2025, at Mountain View memorial park)

Bruce Hanson WE7P is still laid up with knee problems; he is getting better, but not yet ready for prime time.

President's updates: We should begin talking about what projects committees are planning in 2026. It would be helpful to know if any committees are planning a large project next year. This will help the board with 2026 planning. Also, the club should take advantage of available grants in 2025.

2026 projects and fund raising:
Available Grants ARDC.net has opportunities for applications July 1st and September 1st. Plus a scholarship application in September.



ARRL has opportunities June 1st through the 30th and again On October 1st – 30th 2025.

Secretary's Report (Gary WG7X)

Nothing of note this month. Not even very much mail in our PO Box. One renewal and one Bigfoot certificate request.

Treasurer's Report (Doug Schafer as Temporary Treasurer)

BOD reviewed Doug AB7DG's report that was distributed via email and provided in print to attendees. Doug wants the officers and chairs to read the report and submit questions or comments for future meetings.

Doug included the following document as included for the bank as a motion: Adam W2NCC made the motion, Mike W7MKE seconded the motion; motion passed unanimously. Signed by Adam W3NCC & Gary WG7X at the meeting.

Certificate of Resolution of Action Taken

By the Directors of Radio Club of Tacoma

As Secretary and President of the Radio Club of Tacoma, by signing below we certify that the following motion was approved by the Directors of Radio Club of Tacoma at a meeting on April 2, 2025.

Motion: Authorized signers on all of the club's US Bank accounts, with online access, shall be Gary McAdams, Douglas A. Schafer, and Sharon H. Winget, and each of them may be issued a Visa debit card for the primary checking account, USB #153598976337. That Bank should remove from the accounts our deceased former treasurer, Steve Dightman. Those signers are authorized to close the unnecessary passbook savings account, USB # 253559713628, and to transfer its $500.24 balance to our money market savings account, USB # 153594620368.

Committee Reports

Property Management (Red WB7EC)

Red reports income of $5,650 from Mike& Key hamfest plus general sales in March so far. Red reports that this was one of the best M&K hamfests in the last couple of years. Red reports that whatever didn't sell at the event is still offered for sale to members. Check the list on the bulletin board in the clubhouse. If something you want is on the list, make an offer. All reasonable offers accepted.

Facilities Management (Adam W2NCC)

BOARD OF DIRECTORS



Board-approved minutes from the most recent meeting

Per the request of the HF committee, a fir tree was removed from the west corner of the lot. Many folks participated in this activity, trees were trimmed, and the stump was ground down.

Participants were Gary WG7X, Dave W7GEL, Al N7OMS, Dave AC7KP, Mike W7MKE, Bob K7MXE, Brad KK7YQC picked up the small debris. Adam W2NCC and Dave W7GEL did the stump grinding in a hailstorm!

Dave AC7KP has also been mowing the grass.

Bob K7MXE is investigating some new siding for the clubhouse.

Steve AD7VL and his wife Sharon replaced the pole, tower and flag for the clubhouse. Dave W7GEL and David AC7KP later had to straighten the flagpole after someone backed into it!

General Meeting (Dave W7UUU)

April 12th: All about Meshtastic - in person (Adam Melton KK4GKF)
Other clubs / organizations were also invited to this meeting, so it might be a full house.

President Adam mentioned some reports of small amounts of participants, Adam then sent info to other clubs and MESH aficionado groups so that might bump up the amount of people attending this next meeting.

HF Operations(Phil K7PIA)

All systems are nominal. HF committee did participate in the latest CQWPX contest with 185 Q's. Then the contest was finished at WG7X's station for a total of 343 Q's. The total aggregate score was: 181,610 points. Not bad for an inaugural event. Mike W7MKE Becky, KG7FZH and Julie did the action on Friday and Saturday.

HF committee is looking forward to making changes that will allow more flexibility in interstation operations. More info to follow.

RCT will be needing a new station trustee for W7OS and W7DK licenses.

Info Tech and Website (Randy WB4SPB)

All systems are nominal.

Library (Doug AD7AV)

Doug was not present, Randy said that there was a meeting scheduled for the 10th of April.

BOARD OF DIRECTORS



Board-approved minutes from the most recent meeting

W7DK

Membership (Mike W7XH)

The current membership is 372 our ARRL membership is 224 members.

This week: We reinstated David Kelly who now lives in Great Falls MT.
We welcomed into membership Michael Hayman of San Diego, CA and Kirk Parker of Steilacoom WA.

Museum (Dan KD7SV)

Dan is traveling. The museum did some operating in the classic exchange this past Sunday. We had some visitors. Randy mentions the classic exchange went well with visitors present. Jim W7EK, Greg AC7RX came up to check out the museum.

Planning Committee (Manny AD7MA)

Unfortunately, Manny is not feeling well today, he is in process of setting up the next meeting towards the end of this month. The inventory is almost complete. Expect that revisions to our insurance coverage will be necessary after the current inventory is complete and valuations are complete because of the inventory.

POTA (BJ KO7T)

Pota is coming up on the 13th at Lake Sammamish State Park then on August 10th in Olympic National Park.

Repeater Ops (AL N7OMS)

BJ reports that more people are starting to check into the Tuesday Night nets. BJ also reports that more people are showing up for the Tuesday night 147.280 repeater nets than ever before. BJ is also exploring the idea of a noontime net on the two-meter machine.

At the M&K hamfest Repeater committee acquired a new(ish) controller that will allow narrowband FM. Project is in process. Will need to recover a W7DK repeater controller that is at Nick K7MO's (sk) station.

Training (Stephan AD7AB)

Amateur Radio Technician Class: March 8th & 9th, 2025

We had a successful class this weekend and everyone had a great time. 7 people started the class and six



people completed the class with one person having to move to the April class as they weren't feeling well.

Please find the information on the students below.

Name	City	zip	Call Sign	
Johnston, Aileen	Tacoma	98409	**Retake**	
Constantineau, Amy	Puyallup	98375	**kg7jvy**	**Monitoring**
Sage, Josh	Puyallup	98375		
Valdez, Jeff	Puyallup	98373		
Hansel, Eric	Steilacoom	98385		
Kasperski, Joseph	Gig Harbor	98332		
Syphax, Rhonda	Tacoma	98409		

Tower (TBD?)

Adam reports that we are still awaiting the ladder tray for the cabling.

VE (Stephen AD7AB)

March 11th, 2025, testing session.
Thanks so much to the following VE personnel for signing up for the testing session this evening:
NY6W Howard Crane, AD7MA Emmanuel Adonis, AI7OZ James Roach, KK7VH Richard Heasty, W7XH Michael Isakson, K7FI David Morse, KA7NWF Leonard Burstiner, KG7LNZ Whit Worcester.

We currently have 12 individuals signed up for testing this evening. Please be aware that we are still in training mode for the VE's, and it will be for a few more months as we continue getting everyone used to the overall processes for the new testing system. Thanks everyone for your patience.

BOARD OF DIRECTORS



Board-approved minutes from the most recent meeting

W7DK

Wednesday Workshop (Randy WB4SPB)

In March the weather was inclement, so the March program will now occur on April 23rd.

Unfinished Business:

None reported!

New Business:
Field Day is coming up soon! Mike is looking for a few more band captains. Most bands are now committed. Setup will be the same as last year, with some additional "rocket launcher" work in progress.

The Eagles contract is up for renewal, Adam has that one in hand. We're probably going to use the Eagles facility for the Christmas banquet.

Al N7OMS suggests that we attend a Tacoma Rainiers ballgame this summer. July 24th. Contact Al for reservations.

Adjournment at: ___2034____

Secretary, Gary McAdams, WG7X

Attachments: Attendance sheets.

RADIO CLUB of TACOMA
ATTENDANCE SHEET

BOARD OF DIRECTORS



Board-approved minutes from the most recent meeting

W7DK

Board of Directors Meeting / Agenda
April 2nd, 2025

	NAME	CALLSIGN	RCT NUM
	ATTENDED at Clubhouse	Only non-BOD members BOD at top of minutes.	Applies to Eagles and at clubhouse.
1	Al Ferguson	N7OMS	2107
2	Doug Schafer	AB7DG	2879
3	Sam	N9MII	
4	David Ashley	W7GEL	2787
	Attended via ZOOM		
1	Red Cranefield	WB7EC	2561
2	Dave Ellison	W7UUU	743
3	BJ Rollison	KO7T	3001
4	Randy Meyer	WB4SPB	2050
5	Manny Adonis	AD7MA	3028
6			



Radio Club of Tacoma
General Meeting Minutes
April 12th, 2025

Meeting called to order at 1300

Officers and Directors Present

__X__	President	Adam Barbera W2NCC
__X__	V. President	Manny Adonis AD7MA
__X__	Secretary	Gary McAdams WG7X
__X__	Treasurer	Doug Schafer AB7DG (Temp)
__X__	Board	Dan Vacanti KD7SV
__X__	Board	Dave Ashley W7GEL
__X__	Board	Doug Schafer AB7DG
__X__	Board	Mike Drorbaugh W7MKE
____	Board	Paul Matney W7PFU

NOTE: These approved meeting minutes are reproduced here without any alterations other than to fit the available space, and to redact dollar amounts per Board rules. All language, punctuation, and spelling are exactly as submitted to the editor.

Quorum? (10% of membership is needed to conduct business.) ____Y___

Flag salute led by: Walt WA7SDY. Thanks Walt!

Visitors: Rachel Volez, Adam Melton KK4GKF, Jon Rumsey K7RMZ, Drew Kerlee NC, Rodney Deacon KM7AEW.

New Members: None.

Silent Key or Illness:

Thursday, March 6th, 2025, our longtime friend, mentor, and all around good fellow Nick Winter passed Nick Winter, K7MO became a Silent Key Thursday March 6th, 2025. We will really, really miss him… Rosary for Nick was performed earlier this month. (Editor's note: Memorial services for Nick May 17th, 2025, at Mountain View memorial park)

Bruce Hanson WE7P is still laid up with knee problems; he is getting better, but not yet ready for prime time.

Secretary's Report (Gary WG7X)

GENERAL MEETING



Board-approved minutes from the December 2024 meeting

W7DK

Nothing of note this month. Not even very much mail in our PO Box. One renewal and one Bigfoot certificate request. Now that we are seeing an increase in general meeting attendance, Secretary Gary asks that if anyone wants to receive General meeting agendas via email, just send a request to secretary@w7dk. Secretary will be building a general email list from these requests if there is enough interest.

Adam Barbera W2NCC asked/ designated Secretary Gary WG7X as the new trustee for W7DK. Gary accepted this assignment with gratitude and promised to be a good steward of the club call sign.

General Meeting Program (Dave W7UUU)

April 12th: All about Meshtastic - in person (Adam Melton KK4GKF)
Other clubs / organizations were also invited to this meeting, so it was a full house. Forty-three people signed the attendance roster. That combined with officers and Zoom audience got us to about fifty-five folks in attendance. A very nice discussion by Adam KK4GKF that was completed with a question & answers session afterwards.

Chair /Committee Reports:

President Adam W2NCC talked about the upcoming Bigfoot event. BJ, KO7T will be setting up meetings for this event soon.

Mike W7MKE discussed field day. We're going to try a six-meter station which is something that we've never done before. Dave W7UUU will have a rocket launcher event at his house on May 25th. Dave suggested that observers would be welcome at this event. He also suggested carpooling coordination will occur before the event. Mike suggested meeting up at the clubhouse to carpool out to Dave's home.

Bark articles are due, send to W7UUU asap. Deadline is the 15th of April 12, 2025, for the May issue.

President Adam talked about CERT training being given by the city of Tacoma. Please contact Adam W2NCC for details. It starts June 3rd through June 23rd. All kinds of good info in these classes. More info to follow in the Loggers Bark. Doug Schafer AB7DG elaborated a bit on CERT community classes.
Door Prize Won by: Jiro Oi KW6A got a copy of the ARRL Antenna book. Second prize RF Exposure book to Rachel Volez (No Call) from Puyallup.

Adjournment at: 1431

Attachments: Attendance sheets.



RADIO CLUB of TACOMA

ATTENDANCE SHEET

General Meeting Agenda / Minutes April 12th, 2025

RADIO CLUB of TACOMA
ATTENDANCE SHEET
General Meeting Agenda / Minutes
March 8th, 2025

	NAME	CALLSIGN	RCT NUM
	ATTENDED at Eagles	Only non-BOD members BOD at top of minutes.	Applies to Eagles and at clubhouse.
1	Leonard Burstiner	KA7NWF	2308
2	Mike Drorbaugh	W7MKE	2761
3	PAUL MATNEY	K7PFU	2546
4	ADAM BARBERA	W2NCC	2715
5	RANDY MYERS	WB4SPB	2050
6	WALT MOREY	WA7SDY	2763
7	DAVID STILLWELL	AC7KP	2073
8	DENNIS NELBACH	KJ7DDW	2866
9	MIKE ISAKSON	W7XH	2657
10	DAN VACANTI	KD7SV	2640
12	AL FERGUSON	N7OMS	2107
	ATTENDED VIA ZOOM		
13	DAVE ELLISON	W7UUU	742
14	RICHARD ? (I PHONE)		